

aLOINC Order Code Scope Statement

Background

The Centers for Medicare & Medicaid Services (CMS) is providing incentive payments to health care providers who adopt certified electronic health record technology and use it to demonstrate meaningful use of that technology. The CMS incentive program is being implemented in several stages or phases. Stage 2 criteria for meaningful use focuses on the electronic capturing of health information, including laboratory test results, in a structured format. The structured format for laboratory tests and orders allows the ability to incorporate LOINC (Logical Observation Identifiers Names and Codes) terminology for ordering and reporting laboratory testing. Because of meaningful use certification requirements, laboratories are required to use LOINC terminology in the electronic transmission of laboratory results. However, at this time, laboratories are not required to adopt any standardized vocabulary for the electronic ordering of laboratory tests.

Challenge Statement

The use of non-standardized local codes or terminology to describe laboratory test orders varies widely among laboratories. Universal use of LOINC coding for laboratory order and result information in a structured and systematic fashion is an essential component of interoperability between providers, clinical laboratories and public health laboratories.

Purpose and Goals

This project will focus on the enhancement and expansion of the standardized list of Logical Observation Identifiers Names and Codes (LOINC) Codes for the Most Commonly Ordered Laboratory Tests in ambulatory care settings (Common Order Codes Value Set) that is published by Regenstrief Institute (www.loinc.org). Objective: Identify and standardize LOINC codes for the most frequently ordered laboratory tests in ambulatory care settings (80-95% by test volume) resulting in a more complete and upto-date Common Order Codes Value Set for use in implementation of the EHR Certification Requirements to support Meaningful Use (MU) Stage 3.

Scope Statement

Use of this Data

This project group recognizes the following as true statements:

- There are thousands of existing laboratory orderable tests used for clinical patient care.
- The LOINC database is dynamic and changing frequently.
 - NOTE: Checking the LOINC database for updates at appropriate intervals is recommended as part of good database maintenance.
- There is a relatively small fraction of total possible laboratory orders which comprise the majority of all laboratory test volume in the United States (so-called "common laboratory orders").
- LOINC order codes currently exist for some, but not all, common laboratory orders.

Given the above true statements, the group strongly advises that any implementation of LOINC order codes recognize the following:

- If a laboratory order matches one of the common laboratory orders with associated LOINC codes then the matching LOINC code should be used for the order.
- The absence of a LOINC order code should not prevent the use of a local code for ordering laboratory testing
- However, this does not preclude any of the following:
 - Use of a LOINC order code for a non-common laboratory order.
 - o Processing a laboratory order that does not contain an associated LOINC code.
 - Applying for a new LOINC order code.
 - Re-checking the LOINC order code database at a later date and updating the order with a subsequently available and appropriate LOINC order code.

Laboratory Tests

The following types of laboratory orders are considered **In-Scope**:

- Testing performed for patients in the ambulatory setting
- Single analyte test orders (e.g. Hemoglobin A1C) placed from EHR to LIS
 - Method non-specific (unless standard practice normally specifies a particular method)
 - Specimen type (single type unless multiples are common)
- Fixed panels (e.g. CBC)
 - One for each common combination of analytes
 - Method non-specific (unless standard practice normally specifies a particular method)
 - Specimen type (single type unless multiples are required, then how to treat?)
- Variable panels (such as geographically defined Allergens)
- Reflex testing
- Orders placed between the ambulatory provider's EHR and the laboratory
- Laboratory test orders that are specific for reportable diseases
- Laboratory tests for public health (in addition to the Common Laboratory Orders list) (TBD)

The following types of laboratory orders are considered Out-of-Scope:

- Laboratory Orders that are not commonly placed in an ambulatory setting.
- "Custom" panels
- Testing performed in the physician office

Stakeholders

- · Laboratories that perform testing for patients in the ambulatory care setting
- Public Health Laboratories
- State HIEs
- Local, State, Federal Governments
- Practice Management Systems
- · Patients and patient advocates
- Health Organizations
- Standards and Accreditation Organizations
- Standards Development Organizations
- EHR/EMR Vendors
- Legal Representatives

Expected Deliverables

Two laboratory test lists that are based on analysis of LOINC Order Code and Public Health Order Code data obtained from HIEs, laboratories that perform ambulatory care laboratory testing, and laboratories performing public health testing will be used to:

- Identify the missing orderable laboratory tests or miscoded laboratory test order codes (including panels).
- If needed, develop/create new LOINC order codes for panels/tests identified as missing from the LOINC Order Code and Public Health Order Code data.
- Publish a recommended list of Standard LOINC Order Codes in a publication(s) or communication format which will reach the audience for which this work is intended.
- Provide recommendations for possible incorporation into Meaningful Use Stage 3 Certification Criteria.

Appendix B – Recommended Content Updates for Regenstrief Based on Review of Laboratory Order LOINC Codes

The decision to implement any of these recommendations is up to Regenstrief. The group would like to ask the following issues be considered:

- 1. Allow LOINC codes identified as mass concentration to be equivalent with LOINC codes identified as substance concentration for mapping to a panel (component, timing and specimen must be the same). This would make it easier to share panel codes with Canada rather than developing another code for Canada. Would this be an issue for laboratories that test internationally?
- 2. Review tests that include timed urine due to variation in reporting practices. This is considered one measured test, but should include a set of defined questions e.g., for collections of less than 24 hours -- Collection start/end time, volume. May be possible to use AOE. Some laboratories send AOE back, others do not report back (optional components of the panel) examples temperature, pH, specific gravity. It is suggested the components all be optional so that it has broad use if the laboratory only reports a single measure
 - a. Citrate [Mass/time] in 24 hour Urine (6687-8)
 - b. Calcium [Mass/time] in 24 hour Urine (6874-2)
- 3. Consider changing the following test that are listed as Observation only to Both.

LOINC		
Number	Single Tests	Order/Obs
27812-7	Antithrombin Ag actual/normal in Platelet poor plasma by Immunologic method	Observation
<u>1871-3</u>	Apolipoprotein B-100 [Mass/volume] in Serum or Plasma	Observation
53743-1	Cocaine metabolites.other [Mass/volume] in Urine	Observation
26449-9	Eosinophils [#/volume] in Blood	Observation
789-8	Erythrocytes [#/volume] in Blood by Automated count	Observation
2254-1	Estrogen [Mass/volume] in Serum or Plasma	Observation
13943-6	Fructose [Presence] in Semen	Observation
4625-0	Hemoglobin S/Hemoglobin.total in Blood	Observation
48159-8	Hepatitis C virus Ab Signal/Cutoff in Serum or Plasma by Immunoassay	Observation
38486-7	Homocystine [Presence] in Dried blood spot	Observation
1003-3	Indirect antiglobulin test.complement specific reagent [Presence] in Serum or Plasma	Observation
26464-8	Leukocytes [#/volume] in Blood	Observation
6690-2	Leukocytes [#/volume] in Blood by Automated count	Observation
13349-6	Leukocytes [#/volume] in Stool by Manual count	Observation
13655-6	Leukocytes [Presence] in Stool by Light microscopy	Observation
5803-2	pH of Urine by Test strip	Observation
3969-3	Phenytoin Free [Mass/volume] in Serum or Plasma	Observation
26515-7	Platelets [#/volume] in Blood	Observation
777-3	Platelets [#/volume] in Blood by Automated count	Observation
27818-4	Protein C actual/normal in Platelet poor plasma by Chromogenic method	Observation
27820-0	Protein C Ag actual/normal in Platelet poor plasma by Immunologic method	Observation
56764-4	Protein fractions.oligoclonal bands.lgG [Presence] in Cerebral spinal fluid by Isoelectric focusing	Observation
27822-6	Protein S actual/normal in Platelet poor plasma by Coagulation assay	Observation
4679-7	Reticulocytes/100 erythrocytes in Blood	Observation
17849-1	Reticulocytes/100 erythrocytes in Blood by Automated count	Observation
5811-5	Specific gravity of Urine by Test strip	Observation
6014-5	von Willebrand factor (vWf) ristocetin cofactor actual/normal in Platelet poor plasma by Aggregati	Observation

- 4. Need a clear definition of when to use single test code and when to use panel code for ABO/Rh test. ABO never reported without an RH, so they should be together. Some separate the two for billing purposes or based on the LIS. This group would like to encourage guidance be written in the term definition for when to order a single test vs a panel.
- 5. Need a clear definition of the panels for drug testing where you only report positive results. The panel should allow substitution rules for drugs tested and include a list of all possible drugs that would be identified as conditional. This would help vendors know how many to report back.
- 6. It was agreed that these Business Rules/Guidelines would be published as a separate section in the LOINC User's Manual as the primary source of information. If they are referenced in other documents, a link to this section should be included and not the content. Need to provide an introduction to what these rules are for.
- 7. How do we deal with the test we identified that are "Discouraged" but still being used and there is no replacement term. User's manual defines that discouraged terms may still be used.
- 8. Do we need a comment regarding panels with no children? Canadian terms are also in the category. Dan stated that some were created during time HL7 was building the cytogenetic IG and therefore, may need to be deprecated. 80% rule? Laboratory would need to determine how they handle these codes (panels without children).
- 9. Need guidance with the following panel/single tests issues:
 - a. When tests should be listed as a panel and not as a single test
 - Vanillylmandelate/Creatinine [Mass Ratio] in Urine (3124-5); also suggestion to change to Result only. Current panel includes other analytes. May be other examples.
 - b. When panels do not have components
 - c. Chromosome analysis panel Blood by G-banded (62348-8); created in conjunction with HL7 reporting style may not be used any longer and may need to deprecate. Need to check with HL7. Need narrative description of the elements.
 - d. When there are multiple observations that are not a panel needs one order code; CDC has a guide for these.
 - 1. Muscle Pathology biopsy report (65751-0)
 - 2. Liver Pathology biopsy report (65752-8)
 - 3. Skin Pathology biopsy report (65754-4); component of panel 62353-8
 - 4. Kidney Pathology biopsy report (65757-7)
 - e. 24 hr urine panels suggest to make components all optional so that it has broad use if the laboratory only reports a single measure. Dan suggested there be links to optional components from the panel code. Two separate new fields: 1) AOE panel 2) Accessory

information panel. Order single code and other OBX segments linked together w/o having to create new panels (with separate LOINC codes) for each combination.

- 1.Citrate [Mass/time] in 24 hour Urine (6687-8)
- 2.Calcium [Mass/time] in 24 hour Urine (6874-2)
- 10. Change name of panel for 43126-2: Cortisol.free panel 24 hour Urine Child elements do not have .free in them.

11. Suggest getting rid of all dashes and use R/O/C as appropriate. Example for suggested changes for R and O in panels:

LOINC Code	Panel Name	LOINC Code (Component)	Panel Components	R/O/C	Comment
71775-1	Mycobacterium tuberculosis stimulated gamma interferon panel - Blood (QuantiFERON-TB GOLD)	71776-9	Gamma interferon background [Units/volume] in Blood by Immunoassay	R	
		71772-8	Mitogen stimulated gamma interferon [Units/volume] in Blood	0	suggestion: change to R
		71774-4	Mitogen stimulated gamma interferon [Units/volume] corrected for background in Blood	R	
		46217-6	Mycobacterium tuberculosis stimulated gamma interferon [Units/volume] in Blood	0	suggestion: change to R
		64084-7	Mycobacterium tuberculosis stimulated gamma interferon [Units/volume] corrected for background in Blood	R	
		71773-6	Mycobacterium tuberculosis stimulated gamma interferon [Presence] in Blood	R	
74281-7	Mycobacterium tuberculosis stimulated gamma interferon and spot count panel - Blood (Mycobacterium tuberculosis stimulated gamma interferon & spot count panel)	74280-9	Mitogen stimulated gamma interferon positive control spot count [#] in Blood	-	
		74279-1	Mitogen stimulated gamma interferon negative control spot count [#] in Blood	-	suggest that all dashes be
		74278-3	Mycobacterium tuberculosis stimulated gamma interferon ESAT-6 Ag spot count [#] in Blood	-	О
		74277-5	Mycobacterium tuberculosis stimulated gamma interferon CFP10 Ag spot count [#] in Blood	-	
		71773-6	Mycobacterium tuberculosis stimulated gamma interferon [Presence] in Blood	R	



LOINC Number	aLOINC Common Order Codes Value Set: Single Tests	Order/Obs
42176-8	1,3 beta glucan [Mass/volume] in Serum	Both
53835-5	1,5-Anhydroglucitol [Mass/volume] in Serum or Plasma	Both
31019-3	10-Hydroxycarbazepine [Mass/volume] in Serum or Plasma	Both
6765-2	17-Hydroxypregnenolone [Mass/volume] in Serum or Plasma	Both
1668-3	17-Hydroxyprogesterone [Mass/volume] in Serum or Plasma	Both
32854-2	17-Hydroxyprogesterone [Presence] in Dried blood spot	Both
49054-0	25-Hydroxycalciferol [Mass/volume] in Serum or Plasma	Both
1690-7	5'-Nucleotidase [Enzymatic activity/volume] in Serum or Plasma	Both
19593-3	6-Monoacetylmorphine (6-MAM) [Mass/volume] in Urine by Confirmatory method	Both
10976-9	6-Monoacetylmorphine (6-MAM) [Presence] in Urine	Both
51776-3	7-Aminoclonazepam [Mass/volume] in Urine by Confirmatory method	Both
882-1	ABO and Rh group [Type] in Blood	Both
46268-9	ABO and Rh group [Type] in Blood from Blood product unitafter transfusion reaction	Both
19057-9	ABO and Rh group [Type] in Blood from newborn	Both
883-9	ABO group [Type] in Blood	Both
3298-7	Acetaminophen [Mass/volume] in Serum or Plasma	Both
35595-8	Acetaminophen [Mass/volume] in Serum or Plasma by Screen method	Both
3297-9	Acetaminophen [Presence] in Serum or Plasma	Both
3299-5	Acetaminophen [Presence] in Urine	Both
5568-1	Acetone [Mass/volume] in Serum or Plasma	Both
20469-3	Acetone [Presence] in Serum or Plasma by Screen method	Both
5569-9	Acetone [Presence] in Urine	Both
20427-1	Acetylcholine receptor Ab [Moles/volume] in Serum	Both
11034-6	Acetylcholine receptor binding Ab [Moles/volume] in Serum	Both
11561-8	Acetylcholine receptor blocking Ab [Units/volume] in Serum	Both
30192-9	Acetylcholine receptor modulation Ab/Acetylcholine Ab.total in Serum	Both
6066-5	Acremonium sp IgE Ab [Units/volume] in Serum	Both
34661-9	Actin IgG Ab [Units/volume] in Serum or Plasma	Both
3184-9	Activated clotting time in Blood by Coagulation assay	Both
3173-2	Activated partial thromboplastin time (aPTT) in Blood by Coagulation assay	Both
49058-1	Activated partial thromboplastin time (aPTT) in Blood drawn from CRRT circuit by Coagulation assay	Both
14979-9	Activated partial thromboplastin time (aPTT) in Platelet poor plasma by Coagulation assay	Both

13589-7	Activated protein C resistance [Presence] in Blood by Probe and target amplification method	Both
13590-5	Activated protein C resistance [Time Ratio] in Platelet poor plasma by Coagulation assay	Both
1721-0	Adenosine triphosphate [Mass/volume] in Blood	Both
5834-7	Adenovirus Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
1742-6	Alanine aminotransferase [Enzymatic activity/volume] in Serum or Plasma	Both
1747-5	Albumin [Mass/volume] in Body fluid	Both
1746-7	Albumin [Mass/volume] in Cerebral spinal fluid	Both
1751-7	Albumin [Mass/volume] in Serum or Plasma	Both
1761-6	Aldolase [Enzymatic activity/volume] in Serum or Plasma	Both
1763-2	Aldosterone [Mass/volume] in Serum or Plasma	Both
6768-6	Alkaline phosphatase [Enzymatic activity/volume] in Serum or Plasma	Both
1777-2	Alkaline phosphatase.bone [Enzymatic activity/volume] in Serum or Plasma	Both
17838-4	Alkaline phosphatase.bone [Mass/volume] in Serum or Plasma	Both
6019-4	Almond IgE Ab [Units/volume] in Serum	Both
1825-9	Alpha 1 antitrypsin [Mass/volume] in Serum or Plasma	Both
6771-0	Alpha 1 antitrypsin [Mass/volume] in Serum or Plasma by Nephlometry	Both
1823-4	Alpha tocopherol [Mass/volume] in Serum or Plasma	Both
1834-1	Alpha-1-Fetoprotein [Mass/volume] in Serum or Plasma	Both
19171-8	Alpha-1-Fetoprotein [Units/volume] in Amniotic fluid	Both
10459-6	Alpha-1-Fetoprotein Ag [Presence] in Tissue by Immune stain	Both
53962-7	Alpha-1-fetoprotein.tumor marker [Mass/volume] in Serum or Plasma	Both
6020-2	Alternaria alternata IgE Ab [Units/volume] in Serum	Both
5574-9	Aluminum [Mass/volume] in Serum or Plasma	Both
6038-4	American Beech IgE Ab [Units/volume] in Serum	Both
30170-5	American Cockroach IgE Ab [Units/volume] in Serum	Both
6095-4	American house dust mite IgE Ab [Units/volume] in Serum	Both
6263-8	American Sycamore IgE Ab [Units/volume] in Serum	Both
3321-7	Amikacin [Mass/volume] in Serum or Plasmatrough	Both
22763-7	Ammonia [Mass/volume] in Plasma	Both
16362-6	Ammonia [Moles/volume] in Plasma	Both
19343-3	Amphetamine [Presence] in Urine by Screen method	Both
8150-5	Amphetamines [Mass/volume] in Urine	Both
8144-8	Amphetamines [Presence] in Meconium	Both

Amphetamines [Presence] in Meconium by Screen method	Both
Amphetamines [Presence] in Serum or Plasma by Screen method	Both
Amphetamines [Presence] in Urine	Both
Amphetamines [Presence] in Urine by Screen method	Both
Amphetamines [Presence] in Urine by Screen method >500 ng/mL	Both
Amylase [Enzymatic activity/volume] in Body fluid	Both
Amylase [Enzymatic activity/volume] in Serum or Plasma	Both
Anabasine [Mass/volume] in Urine	Both
Anaplasma phagocytophilum IgG Ab [Titer] in Serum by Immunofluorescence	Both
Anaplasma phagocytophilum IgM Ab [Titer] in Serum by Immunofluorescence	Both
Androstanolone [Mass/volume] in Serum or Plasma	Both
Androstenedione [Mass/volume] in Serum or Plasma	Both
Angiotensin converting enzyme [Enzymatic activity/volume] in Blood	Both
Angiotensin converting enzyme [Enzymatic activity/volume] in Cerebral spinal fluid	Both
Angiotensin converting enzyme [Enzymatic activity/volume] in Serum or Plasma	Both
Antithrombin [Units/volume] in Platelet poor plasma by Chromogenic method	Both
Antithrombin actual/normal in Platelet poor plasma by Chromogenic method	Both
Antithrombin Ag [Units/volume] in Platelet poor plasma by Immunologic method	Both
Antithrombin Ag actual/normal in Platelet poor plasma by Immunologic method	Observation
APOE gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
Apolipoprotein A-I [Mass/volume] in Serum or Plasma	Both
Apolipoprotein B [Mass/volume] in Serum or Plasma	Both
Apolipoprotein B-100 [Mass/volume] in Serum or Plasma	Observation
Apolipoprotein LPA [Mass/volume] in Serum or Plasma	Both
Apple IgE Ab [Units/volume] in Serum	Both
Aquaporin 4 receptor Ab [Units/volume] in Serum or Plasma by Immunoassay	Both
Arsenic [Mass/volume] in Blood	Both
Ascorbate [Mass/volume] in Serum or Plasma	Both
Ascorbate [Moles/volume] in Serum or Plasma	Both
Aspartate aminotransferase [Enzymatic activity/volume] in Serum or Plasma	Both
Aspergillus flavus Ab [Presence] in Serum	Both
Aspergillus fumigatus Ab [Presence] in Serum	Both
	Amphetamines [Presence] in Urine Amphetamines [Presence] in Urine by Screen method >500 ng/mL Amylase [Enzymatic activity/volume] in Body fluid Amylase [Enzymatic activity/volume] in Serum or Plasma Anabasine [Mass/volume] in Urine Anaplasma phagocytophilum IgM Ab [Titer] in Serum by Immunofluorescence Anaplasma phagocytophilum IgM Ab [Titer] in Serum by Immunofluorescence Androstanolone [Mass/volume] in Serum or Plasma Androstenedione [Mass/volume] in Serum or Plasma Angiotensin converting enzyme [Enzymatic activity/volume] in Elbod Angiotensin converting enzyme [Enzymatic activity/volume] in Serum or Plasma Antithrombin (Units/volume) in Platelet poor plasma by Chromogenic method Antithrombin [Units/volume] in Platelet poor plasma by Chromogenic method Antithrombin Ag (Units/volume) in Platelet poor plasma by Immunologic method Antithrombin Ag actual/normal in Platelet poor plasma by Immunologic method Antithrombin Ag actual/normal in Platelet poor plasma by Immunologic method APOE gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal Apolipoprotein A-I [Mass/volume] in Serum or Plasma Apolipoprotein B-100 [Mass/volume] in Serum or Plasma Apolipoprotein A-I [Mass/volume] in Serum or Plasma Apolipoprotein A-I [Mass/volume] in Serum or Plasma Apolipoprotein B-100 [Mass/volume] in Serum or Plasma Ascorbate [Mass/volume] in Serum or Plasma

22086-3	Aspergillus niger Ab [Presence] in Serum	Both
5052-6	Aspergillus sp Ab [Presence] in Serum by Immune diffusion (ID)	Both
5053-4	Aspergillus sp Ab [Titer] in Serum by Complement fixation	Both
6029-3	Aureobasidium pullulans IgE Ab [Units/volume] in Serum	Both
16117-4	Babesia microti IgG Ab [Titer] in Serum	Both
16118-2	Babesia microti IgM Ab [Titer] in Serum	Both
595-9	Bacteria identified in Abscess by Aerobe culture	Both
600-7	Bacteria identified in Blood by Culture	Both
610-6	Bacteria identified in Body fluid by Aerobe culture	Both
611-4	Bacteria identified in Body fluid by Culture	Both
19126-2	Bacteria identified in Bone marrow by Aerobe culture	Both
43441-5	Bacteria identified in Bronchoalveolar lavage by Aerobe culture	Both
19128-8	Bacteria identified in Catheter tip by Culture	Both
606-4	Bacteria identified in Cerebral spinal fluid by Culture	Both
9822-8	Bacteria identified in Dialysis fluid by Culture	Both
608-0	Bacteria identified in Ear by Aerobe culture	Both
609-8	Bacteria identified in Eye by Aerobe culture	Both
10352-3	Bacteria identified in Genital specimen by Aerobe culture	Both
42803-7	Bacteria identified in Isolate	Both
10353-1	Bacteria identified in Nose by Aerobe culture	Both
619-7	Bacteria identified in Peritoneal fluid by Culture	Both
6460-0	Bacteria identified in Sputum by Culture	Both
623-9	Bacteria identified in Sputum by Cystic fibrosis respiratory culture	Both
624-7	Bacteria identified in Sputum by Respiratory culture	Both
625-4	Bacteria identified in Stool by Culture	Both
621-3	Bacteria identified in Synovial fluid by Culture	Both
17898-8	Bacteria identified in Throat by Aerobe culture	Both
626-2	Bacteria identified in Throat by Culture	Both
627-0	Bacteria identified in Tissue by Aerobe culture	Both
20474-3	Bacteria identified in Tissue by Biopsy culture	Both
634-6	Bacteria identified in Unspecified specimen by Aerobe culture	Both
635-3	Bacteria identified in Unspecified specimen by Anaerobe culture	Both
21020-3	Bacteria identified in Unspecified specimen by Anaerobe+Aerobe culture	Both

6463-4	Bacteria identified in Unspecified specimen by Culture	Both
32355-0	Bacteria identified in Unspecified specimen by Respiratory culture	Both
630-4	Bacteria identified in Urine by Culture	Both
11261-5	Bacteria identified in Vaginal fluid by Aerobe culture	Both
6462-6	Bacteria identified in Wound by Culture	Both
43407-6	Bacteria identified in Wound deep by Culture	Both
41477-1	Bacterial sialidase [Presence] in Unspecified specimen	Both
6034-3	Bahia grass IgE Ab [Units/volume] in Serum	Both
31032-6	Baker's yeast IgA Ab [Units/volume] in Serum	Both
47320-7	Baker's yeast IgA Ab [Units/volume] in Serum by Immunoassay	Both
6287-7	Baker's yeast IgE Ab [Units/volume] in Serum	Both
35538-8	Baker's yeast IgG Ab [Mass/volume] in Serum	Both
6035-0	Banana IgE Ab [Units/volume] in Serum	Both
9426-8	Barbiturates [Mass/volume] in Urine	Both
3376-1	Barbiturates [Presence] in Serum, Plasma or Blood	Both
3377-9	Barbiturates [Presence] in Urine	Both
19270-8	Barbiturates [Presence] in Urine by Screen method	Both
6037-6	Barley IgE Ab [Units/volume] in Serum	Both
9360-9	Bartonella quintana IgG Ab [Titer] in Serum	Both
9361-7	Bartonella quintana IgM Ab [Titer] in Serum	Both
7124-1	Bayberry Pollen IgE Ab [Units/volume] in Serum	Both
6039-2	Beef IgE Ab [Units/volume] in Serum	Both
9428-4	Benzodiazepines [Mass/volume] in Urine	Both
3389-4	Benzodiazepines [Presence] in Serum or Plasma	Both
3390-2	Benzodiazepines [Presence] in Urine	Both
16195-0	Benzodiazepines [Presence] in Urine by Confirmatory method	Both
14316-4	Benzodiazepines [Presence] in Urine by Screen method	Both
70141-7	Benzodiazepines [Presence] in Urine by Screen method >200 ng/mL	Both
8187-7	Benzoylecgonine [Presence] in Meconium	Both
3393-6	Benzoylecgonine [Presence] in Urine	Both
14314-9	Benzoylecgonine [Presence] in Urine by Screen method	Both
43984-4	Benzoylecgonine [Presence] in Urine by Screen method >150 ng/mL	Both
6041-8	Bermuda grass IgE Ab [Units/volume] in Serum	Both

Beta 2 glycoprotein 1 IgA Ab [Units/volume] in Serum	Both
Beta 2 glycoprotein 1 IgA Ab [Units/volume] in Serum by Immunoassay	Both
Beta 2 glycoprotein 1 IgG Ab [Units/volume] in Serum	Both
Beta 2 glycoprotein 1 IgG Ab [Units/volume] in Serum by Immunoassay	Both
Beta 2 glycoprotein 1 IgM Ab [Units/volume] in Serum	Both
Beta 2 glycoprotein 1 IgM Ab [Units/volume] in Serum by Immunoassay	Both
Beta hydroxybutyrate [Mass/volume] in Serum or Plasma	Both
Beta hydroxybutyrate [Moles/volume] in Serum or Plasma	Both
Beta lactamase organism identified in Isolate	Both
Beta-2-Microglobulin [Mass/volume] in Serum	Both
Bile acid [Moles/volume] in Serum	Both
Bilirubin.direct [Mass/volume] in Serum or Plasma	Both
Bilirubin.total [Mass/volume] in Body fluid	Both
Bilirubin.total [Mass/volume] in Serum or Plasma	Both
Bilirubin.total [Mass/volume] in Urine	Both
Bilirubin.total [Presence] in Urine	Both
Biotinidase [Presence] in Dried blood spot	Both
BK virus DNA [#/volume] (viral load) in Serum or Plasma by Probe and target amplification method	Both
BK virus DNA [#/volume] (viral load) in Urine by Probe and target amplification method	Both
BK virus DNA [Units/volume] (viral load) in Serum or Plasma by Probe and target amplification method	Both
Blastomyces dermatitidis Ab [Presence] in Serum	Both
Blastomyces dermatitidis Ab [Titer] in Serum by Complement fixation	Both
Blastomyces dermatitidis Ag [Presence] in Serum by Immunoassay	Both
Bleeding time	Both
Blood bank consult	Both
Blood group antibodies identified in Serum or Plasma	Both
Blood group antibody investigation [interpretation] in Plasma or RBC	Observation
Blood group antibody screen [Presence] in Serum or Plasma	Both
Bone marrow Pathology biopsy report	Both
Bordetella pertussis [Presence] in Nasopharynx by Organism specific culture	Both
Bordetella pertussis Ab [Presence] in Unspecified specimen by Immunofluorescence	Both
Bordetella pertussis Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
Bordetella pertussis IgG Ab [Units/volume] in Serum by Immunoassay	Both
	Beta 2 glycoprotein 1 IgA Ab [Units/volume] in Serum by Immunoassay Beta 2 glycoprotein 1 IgG Ab [Units/volume] in Serum by Immunoassay Beta 2 glycoprotein 1 IgG Ab [Units/volume] in Serum by Immunoassay Beta 2 glycoprotein 1 IgM Ab [Units/volume] in Serum by Immunoassay Beta 2 glycoprotein 1 IgM Ab [Units/volume] in Serum by Immunoassay Beta 2 glycoprotein 1 IgM Ab [Units/volume] in Serum by Immunoassay Beta 2 glycoprotein 1 IgM Ab [Units/volume] in Serum by Immunoassay Beta 3 glycoprotein 1 IgM Ab [Units/volume] in Serum or Plasma Beta 4 hydroxybutyrate [Moles/volume] in Serum or Plasma Beta 4 hydroxybutyrate [Moles/volume] in Serum or Plasma Beta 6 hydroxybutyrate [Mass/volume] in Serum Bille acid [Moles/volume] in Serum Bille acid [Moles/volume] in Serum or Plasma Billrubin.total [Mass/volume] in Serum or Plasma Billrubin.total [Mass/volume] in In Bedy fluid Billrubin.total [Mass/volume] in Urine Billirubin.total [Mass/volume] in Urine Billirubin.total [Presence] in Urine Billrubin.total [Presence] in Urine Billrubin.total [Presence] in Urine Billrubin.total [Presence] (viral load) in Serum or Plasma by Probe and target amplification method BK virus DNA [#/volume] (viral load) in Serum or Plasma by Probe and target amplification method BK virus DNA [Units/volume] (viral load) in Serum or Plasma by Probe and target amplification method Blastomyces dermatitidis Ab [Presence] in Serum by Immunoassay Bleeding time Blood group antibodies identified in Serum or Plasma Blood group antibody investigation [interpretation] in Plasma or RBC Blood group antibody presence [Presence] in Serum or Plasma Bone marrow Pathology biopsy report Bordetella pertussis Ab [Presence] in Unspecified specimen by Immunofluorescence Bordetella pertussis Ag [Presence] in Unspecified specimen by Immunofluorescence

11006-4	Borrelia burgdorferi Ab [Presence] in Serum	Both
20449-5	Borrelia burgdorferi Ab [Presence] in Serum by Immunoassay	Both
6318-0	Borrelia burgdorferi Ab [Units/volume] in Cerebral spinal fluid by Immunoassay	Both
4991-6	Borrelia burgdorferi DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
7817-0	Borrelia burgdorferi IgG Ab [Units/volume] in Serum	Both
5062-5	Borrelia burgdorferi IgG Ab [Units/volume] in Serum by Immunoassay	Both
22131-7	Borrelia burgdorferi IgG+IgM Ab [Presence] in Serum	Both
34148-7	Borrelia burgdorferi IgG+IgM Ab [Units/volume] in Serum	Both
5064-1	Borrelia burgdorferi IgM Ab [Units/volume] in Serum by Immunoassay	Both
7155-5	Boxelder IgE Ab [Units/volume] in Serum	Both
38479-2	Branched chain keto-acid dehydrogenase complex [Presence] in Dried blood spot	Both
6050-9	Brazil Nut IgE Ab [Units/volume] in Serum	Both
3414-0	Buprenorphine [Presence] in Urine	Both
1986-9	C peptide [Mass/volume] in Serum or Plasma	Both
1988-5	C reactive protein [Mass/volume] in Serum or Plasma	Both
30522-7	C reactive protein [Mass/volume] in Serum or Plasma by High sensitivity method	Both
11039-5	C reactive protein [Presence] in Serum or Plasma	Both
5609-3	Cadmium [Mass/volume] in Blood	Both
3422-3	Caffeine [Mass/volume] in Serum or Plasma	Both
1989-3	Calcidiol [Mass/volume] in Serum or Plasma	Both
49543-2	Calcidiol+Calciferol [Mass/volume] in Serum or Plasma	Both
2236-8	Calciferol (Vit D2) [Mass/volume] in Serum or Plasma	Both
1992-7	Calcitonin [Mass/volume] in Serum or Plasma	Both
1649-3	Calcitriol [Mass/volume] in Serum or Plasma	Both
18488-7	Calcium [Mass/volume] in 24 hour Urine	Both
49765-1	Calcium [Mass/volume] in Blood	Both
17861-6	Calcium [Mass/volume] in Serum or Plasma	Both
35675-8	Calcium [Mass/volume] in unspecified time Urine	Both
17862-4	Calcium [Mass/volume] in Urine	Both
17863-2	Calcium, Ionized	Both
38230-9	Calcium.ionized [Mass/volume] in Blood	Both
17864-0	Calcium.ionized [Mass/volume] in Serum or Plasma by Ion-selective membrane electrode (ISE)	Both
1994-3	Calcium.ionized [Moles/volume] in Blood	Both

1995-0	Calcium.ionized [Moles/volume] in Serum or Plasma	Both
49255-3	Calculus analysis [interpretation] in Stone by Infrared spectroscopy Narrative	Observation
6274-5	California Walnut IgE Ab [Units/volume] in Serum	Both
38445-3	Calprotectin [Mass/mass] in Stool	Both
6331-3	Campylobacter sp identified in Stool by Organism specific culture	Both
2006-5	Cancer Ag 125 [Presence] in Serum or Plasma	Both
10334-1	Cancer Ag 125 [Units/volume] in Serum or Plasma	Both
6875-9	Cancer Ag 15-3 [Units/volume] in Serum or Plasma	Both
24108-3	Cancer Ag 19-9 [Units/volume] in Serum or Plasma	Both
17842-6	Cancer Ag 27-29 [Units/volume] in Serum or Plasma	Both
6059-0	Candida albicans IgE Ab [Units/volume] in Serum	Both
35270-8	Candida sp Ab [Presence] in Serum by Immune diffusion (ID)	Both
47000-5	Candida sp rRNA [Presence] in Vaginal fluid by DNA probe	Both
42860-7	Cannabinoids [Mass/volume] in Urine	Both
31080-5	Cannabinoids [Presence] in Meconium by Screen method	Both
18282-4	Cannabinoids [Presence] in Urine by Screen method	Both
70145-8	Cannabinoids [Presence] in Urine by Screen method >50 ng/mL	Both
3432-2	Carbamazepine [Mass/volume] in Serum or Plasma	Both
2028-9	Carbon dioxide, total [Moles/volume] in Serum or Plasma	Both
3436-3	Carboxy tetrahydrocannabinol [Mass/volume] in Urine	Both
20521-1	Carboxy tetrahydrocannabinol [Mass/volume] in Urine by Confirmatory method	Both
20563-3	Carboxyhemoglobin/Hemoglobin.total in Blood	Both
2039-6	Carcinoembryonic Ag [Mass/volume] in Serum or Plasma	Both
5076-5	Cardiolipin IgA Ab [Units/volume] in Serum by Immunoassay	Both
3181-5	Cardiolipin IgG Ab [Units/volume] in Serum by Immunoassay	Both
3182-3	Cardiolipin IgM Ab [Units/volume] in Serum by Immunoassay	Both
2053-7	Carotene [Mass/volume] in Serum	Both
6061-6	Carrot IgE Ab [Units/volume] in Serum	Both
6062-4	Casein IgE Ab [Units/volume] in Serum	Both
53829-8	Casein IgG Ab [Mass/volume] in Serum	Both
6718-1	Cashew Nut IgE Ab [Units/volume] in Serum	Both
6833-8	Cat dander IgE Ab [Units/volume] in Serum	Both
8068-9	Centromere Ab [Units/volume] in Serum	Both

53982-5	Centromere protein B Ab [Units/volume] in Serum	Both
2064-4	Ceruloplasmin [Mass/volume] in Serum or Plasma	Both
38404-0	CFTR gene mutation analysis in Blood or Tissue by Molecular genetics method Narrative	Both
21654-9	CFTR gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
19734-3	Chicken droppings IgE Ab [Units/volume] in Serum	Both
6070-7	Chicken feather IgE Ab [Units/volume] in Serum	Both
6071-5	Chicken meat IgE Ab [Units/volume] in Serum	Both
560-3	Chlamydia sp identified in Unspecified specimen by Organism specific culture	Both
6349-5	Chlamydia trachomatis [Presence] in Unspecified specimen by Organism specific culture	Both
21190-4	Chlamydia trachomatis DNA [Presence] in Cervix by Probe and target amplification method	Both
21613-5	Chlamydia trachomatis DNA [Presence] in Unspecified specimen by Probe and target amplification	Both
6357-8	Chlamydia trachomatis DNA [Presence] in Urine by Probe and target amplification method	Both
50387-0	Chlamydia trachomatis rRNA [Presence] in Cervix by Probe and target amplification method	Both
4993-2	Chlamydia trachomatis rRNA [Presence] in Unspecified specimen by DNA probe	Both
43304-5	Chlamydia trachomatis rRNA [Presence] in Unspecified specimen by Probe and target amplification	Both
53925-4	Chlamydia trachomatis rRNA [Presence] in Urethra by Probe and target amplification method	Both
42931-6	Chlamydia trachomatis rRNA [Presence] in Urine by Probe and target amplification method	Both
36903-3	Chlamydia trachomatis+Neisseria gonorrhoeae DNA in Unspecified spec. by Probe & target amplification	Both
21184-7	Chlamydophila pneumoniae [Presence] in Unspecified specimen by Organism specific culture	Both
2069-3	Chloride [Moles/volume] in Blood	Both
2075-0	Chloride [Moles/volume] in Serum or Plasma	Both
2077-6	Chloride [Moles/volume] in Sweat	Both
35676-6	Chloride [Moles/volume] in unspecified time Urine	Both
2078-4	Chloride [Moles/volume] in Urine	Both
6073-1	Chocolate IgE Ab [Units/volume] in Serum	Both
1990-1	Cholecalciferol (Vit D3) [Mass/volume] in Serum or Plasma	Both
2093-3	Cholesterol [Mass/volume] in Serum or Plasma	Both
2085-9	Cholesterol in HDL [Mass/volume] in Serum or Plasma	Both
2089-1	Cholesterol in LDL [Mass/volume] in Serum or Plasma	Both
18262-6	Cholesterol in LDL [Mass/volume] in Serum or Plasma by Direct assay	Both
2118-8	Choriogonadotropin (pregnancy test) [Presence] in Serum or Plasma	Both
2106-3	Choriogonadotropin (pregnancy test) [Presence] in Urine	Both
19080-1	Choriogonadotropin [Units/volume] in Serum or Plasma	Both

25372-4	Choriogonadotropin [Units/volume] in Urine	Both
2110-5	Choriogonadotropin.beta subunit (pregnancy test) [Presence] in Serum or Plasma	Both
2112-1	Choriogonadotropin.beta subunit (pregnancy test) [Presence] in Urine	Both
2111-3	Choriogonadotropin.beta subunit [Moles/volume] in Serum or Plasma	Both
2114-7	Choriogonadotropin.beta subunit [Moles/volume] in Urine	Both
43799-6	Choriogonadotropin.beta subunit [Presence] in Unspecified specimen	Both
21198-7	Choriogonadotropin.beta subunit [Units/volume] in Serum or Plasma	Both
2115-4	Choriogonadotropin.beta subunit free [Moles/volume] in Serum or Plasma	Both
30243-0	Choriogonadotropin.intact [Units/volume] in Serum or Plasma	Both
45194-8	Choriogonadotropin.intact+Beta subunit [Units/volume] in Serum or Plasma	Both
53959-3	Choriogonadotropin.tumor marker [Units/volume] in Serum or Plasma	Both
51775-5	Chromatin Ab [Units/volume] in Serum or Plasma	Both
5619-2	Chromium [Mass/volume] in Blood	Both
5622-6	Chromium [Mass/volume] in Serum or Plasma	Both
9811-1	Chromogranin A [Mass/volume] in Serum or Plasma	Both
25587-7	Chromogranin A [Moles/volume] in Serum or Plasma	Both
30169-7	Chromogranin A [Units/volume] in Serum or Plasma by Immunoassay	Both
50659-2	Chromosome analysis.interphase [interpretation] in Bone marrow by Fluorescent in situ hybridization (FISH) Narrative	Observation
20640-9	Citrulline [Moles/volume] in Serum or Plasma	Observation
6075-6	Cladosporium herbarum IgE Ab [Units/volume] in Serum	Both
7415-3	Cladosporium sphaerospermum IgE Ab [Units/volume] in Serum	Both
6076-4	Clam IgE Ab [Units/volume] in Serum	Both
35603-0	Clonazepam [Mass/volume] in Serum or Plasma by Screen method	Both
34712-0	Clostridium difficile [Presence] in Stool	Both
20761-3	Clostridium difficile [Presence] in Stool by Agglutination	Both
61367-9	Clostridium difficile DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
34713-8	Clostridium difficile toxin A+B [Presence] in Stool	Both
6362-8	Clostridium difficile toxin A+B [Presence] in Stool by Cytotoxin tissue culture assay	Both
34468-9	Clostridium difficile toxin A+B [Presence] in Stool by Immunoassay	Both
54067-4	Clostridium difficile toxin genes [Presence] in Stool by Probe and target amplification method	Both
22203-4	Clostridium tetani IgG Ab [Units/volume] in Serum	Both
6367-7	Clostridium tetani IgG Ab [Units/volume] in Serum by Immunoassay	Both
6896-5	Clozapine [Mass/volume] in Serum or Plasma	Both

3187-2	Coagulation factor IX activity actual/normal in Platelet poor plasma by Coagulation assay	Both
3193-0	Coagulation factor V activity actual/normal in Platelet poor plasma by Coagulation assay	Both
3198-9	Coagulation factor VII activity actual/normal in Platelet poor plasma by Coagulation assay	Both
3209-4	Coagulation factor VIII activity actual/normal in Platelet poor plasma by Coagulation assay	Both
3218-5	Coagulation factor X activity actual/normal in Platelet poor plasma by Coagulation assay	Both
3226-8	Coagulation factor XI activity actual/normal in Platelet poor plasma by Coagulation assay	Both
16695-9	Cobalamin (Vitamin B12) [Mass/volume] in Blood	Both
2132-9	Cobalamin (Vitamin B12) [Mass/volume] in Serum or Plasma	Both
5625-9	Cobalt [Mass/volume] in Blood	Both
5627-5	Cobalt [Mass/volume] in Serum or Plasma	Both
40527-4	Cocaine [Presence] in Meconium	Both
8191-9	Cocaine [Presence] in Serum or Plasma by Screen method	Both
3397-7	Cocaine [Presence] in Urine	Both
53743-1	Cocaine metabolites.other [Mass/volume] in Urine	Observation
5095-5	Coccidioides immitis Ab [Presence] in Serum by Immune diffusion (ID)	Both
5096-3	Coccidioides immitis Ab [Titer] in Serum by Complement fixation	Both
13947-7	Coccidioides immitis IgG Ab [Presence] in Serum by Immunoassay	Both
13948-5	Coccidioides immitis IgM Ab [Presence] in Serum by Immunoassay	Both
6078-0	Cockroach IgE Ab [Units/volume] in Serum	Both
24139-8	Cockroach IgG Ab [Units/volume] in Serum	Both
6195-2	Cocksfoot IgE Ab [Units/volume] in Serum	Both
6081-4	Coconut IgE Ab [Units/volume] in Serum	Both
16250-3	Codeine [Mass/volume] in Urine by Confirmatory method	Both
3507-1	Codeine [Presence] in Urine	Both
6082-2	Codfish IgE Ab [Units/volume] in Serum	Both
5098-9	Cold agglutinin [Titer] in Serum or Plasma by Agglutination	Both
41171-0	Collagen crosslinked C-telopeptide [Mass/volume] in Serum or Plasma	Both
21215-9	Collagen crosslinked N-telopeptide [Moles/volume] in Serum	Both
27939-8	Collagen crosslinked N-telopeptide [Moles/volume] in Urine	Both
14115-0	Collagen crosslinked N-telopeptide/Creatinine [Molar ratio] in Urine	Both
7604-2	Common Pigweed IgE Ab [Units/volume] in Serum	Both
6085-5	Common Ragweed IgE Ab [Units/volume] in Serum	Both
4477-6	Complement C1 esterase inhibitor [Mass/volume] in Serum or Plasma	Both

10634-4	Complement C1 esterase inhibitor.functional/Complement C1 esterase inhibitor.total in Serum or Plasma	Both
4485-9	Complement C3 [Mass/volume] in Serum or Plasma	Both
4498-2	Complement C4 [Mass/volume] in Serum or Plasma	Both
4532-8	Complement total hemolytic CH50 [Units/volume] in Serum or Plasma	Both
5631-7	Copper [Mass/volume] in Serum or Plasma	Both
6087-1	Corn IgE Ab [Units/volume] in Serum	Both
2141-0	Corticotropin [Mass/volume] in Plasma	Both
2142-8	Cortisol [Mass/volume] in Saliva	Both
2143-6	Cortisol [Mass/volume] in Serum or Plasma	Both
9813-7	Cortisol [Mass/volume] in Serum or PlasmaAM peak specimen	Both
9812-9	Cortisol [Mass/volume] in Serum or PlasmaPM trough specimen	Both
2147-7	Cortisol Free [Mass/time] in 24 hour Urine	Both
2145-1	Cortisol Free [Mass/volume] in Serum or Plasma	Both
11040-3	Cortisol Free [Mass/volume] in Urine	Both
5116-9	Corynebacterium diphtheriae Ab [Units/volume] in Serum by Immunoassay	Both
13227-4	Corynebacterium diphtheriae IgG Ab [Units/volume] in Serum	Both
58787-3	Corynebacterium diphtheriae IgG Ab [Units/volume] in Serum by Immunoassay	Both
10366-3	Cotinine [Mass/volume] in Urine	Both
12293-7	Cotinine [Presence] in Urine	Both
6090-5	Cottonwood IgE Ab [Units/volume] in Serum	Both
7258-7	Cow milk IgE Ab [Units/volume] in Serum	Both
56234-8	Cow milk IgG4 Ab [Mass/volume] in Serum	Both
7774-3	Cow whey IgE Ab [Units/volume] in Serum	Both
6092-1	Crab IgE Ab [Units/volume] in Serum	Both
2157-6	Creatine kinase [Enzymatic activity/volume] in Serum or Plasma	Both
32673-6	Creatine kinase.MB [Enzymatic activity/volume] in Serum or Plasma	Both
49551-5	Creatine kinase.MB [Mass/volume] in Blood	Both
13969-1	Creatine kinase.MB [Mass/volume] in Serum or Plasma	Both
20624-3	Creatinine [Mass/volume] in 24 hour Urine	Both
2159-2	Creatinine [Mass/volume] in Amniotic fluid	Both
38483-4	Creatinine [Mass/volume] in Blood	Both
12190-5	Creatinine [Mass/volume] in Body fluid	Both
2160-0	Creatinine [Mass/volume] in Serum or Plasma	Both

35674-1	Creatinine [Mass/volume] in unspecified time Urine	Both
2161-8	Creatinine [Mass/volume] in Urine	Both
11043-7	Cryofibrinogen [Presence] in Plasma	Both
5117-7	Cryoglobulin [Presence] in Serum	Both
31788-3	Cryptococcus sp Ag [Presence] in Cerebral spinal fluid	Both
29533-7	Cryptococcus sp Ag [Presence] in Unspecified specimen	Both
9820-2	Cryptococcus sp Ag [Titer] in Serum by Latex agglutination	Both
41487-0	Cryptosporidium parvum Ag [Presence] in Stool by Immunoassay	Both
20781-1	Cryptosporidium sp [Presence] in Stool by Acid fast stain	Both
6371-9	Cryptosporidium sp Ag [Presence] in Stool by Immunoassay	Both
6372-7	Cryptosporidium sp Ag [Titer] in Stool by Immunofluorescence	Both
6825-4	Crystals [type] in Body fluid by Light microscopy	Both
5781-0	Crystals [type] in Synovial fluid by Light microscopy	Both
32218-0	Cyclic citrullinated peptide Ab [Units/volume] in Serum by Immunoassay	Both
57093-7	Cyclic citrullinated peptide IgA+IgG Ab [Units/volume] in Serum or Plasma by Immunoassay	Both
33935-8	Cyclic citrullinated peptide IgG Ab [Units/volume] in Serum	Both
3520-4	Cyclosporine [Mass/volume] in Blood	Both
32997-9	Cyclosporine [Mass/volume] in Blood2 hours post dose	Both
33863-2	Cystatin C [Mass/volume] in Serum or Plasma	Both
38420-6	Cytokeratin IgG Ab [Units/volume] in Serum by Immunoassay	Both
47528-5	Cytology report of Cervical or vaginal smear or scraping Cyto stain	Both
47527-7	Cytology report of Cervical or vaginal smear or scraping Cyto stain.thin prep	Both
33718-8	Cytology report of Tissue fine needle aspirate Cyto stain	Both
5838-8	Cytomegalovirus [Presence] in Unspecified specimen by Organism specific culture	Both
31797-4	Cytomegalovirus Ag [Presence] in Unspecified specimen	Both
6379-2	Cytomegalovirus Ag [Presence] in Unspecified specimen by Immunoassay	Both
30247-1	Cytomegalovirus DNA [#/volume] (viral load) in Serum or Plasma by Probe and target amplification	Both
33006-8	Cytomegalovirus DNA [#/volume] (viral load) in Unspecified specimen by Probe & target amplification	Both
28008-1	Cytomegalovirus DNA [Presence] in Blood by Probe and signal amplification method	Both
30246-3	Cytomegalovirus DNA [Presence] in Serum or Plasma by Probe and target amplification method	Both
5000-5	Cytomegalovirus DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
7852-7	Cytomegalovirus IgG Ab [Units/volume] in Serum	Both
5124-3	Cytomegalovirus IgG Ab [Units/volume] in Serum by Immunoassay	Both

24119-0	Cytomegalovirus IgM Ab [Presence] in Serum by Immunoassay	Both
49539-0	Cytomegalovirus IgM Ab [Presence] in Serum by Immunofluorescence	Both
5127-6	Cytomegalovirus IgM Ab [Titer] in Serum by Immunofluorescence	Both
5126-8	Cytomegalovirus IgM Ab [Units/volume] in Serum by Immunoassay	Both
2193-1	Dehydroepiandrosterone (DHEA) [Mass/volume] in Serum or Plasma	Both
2196-4	Dehydroepiandrosterone (DHEA).unconjugated [Mass/volume] in Serum or Plasma	Both
2191-5	Dehydroepiandrosterone sulfate (DHEA-S) [Mass/volume] in Serum or Plasma	Both
10535-3	Digoxin [Mass/volume] in Serum or Plasma	Both
6303-2	Dilute Russell viper venom time (dRVVT) in Platelet poor plasma by Coagulation assay	Both
1007-4	Direct antiglobulin test.poly specific reagent [Presence] on Red Blood Cells	Both
11013-0	DNA double strand Ab [Titer] in Serum	Both
34187-5	DNA double strand Ab [Titer] in Serum by Immunofluorescence (IF) Crithidia luciliae	Both
5130-0	DNA double strand Ab [Units/volume] in Serum	Both
10360-6	DNA single strand IgG Ab [Units/volume] in Serum	Both
6098-8	Dog dander IgE Ab [Units/volume] in Serum	Both
6099-6	Dog epithelium IgE Ab [Units/volume] in Serum	Both
7287-6	Dog Fennel IgE Ab [Units/volume] in Serum	Both
2216-0	Dopamine [Mass/volume] in Serum or Plasma	Both
2217-8	Dopamine [Mass/volume] in Urine	Both
40464-0	Drugs identified in Urine by Confirmatory method	Both
6282-8	Eastern White Pine IgE Ab [Units/volume] in Serum	Both
21665-5	EGFR gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
6106-9	Egg white IgE Ab [Units/volume] in Serum	Both
6107-7	Egg yolk IgE Ab [Units/volume] in Serum	Both
9783-2	Ehrlichia chaffeensis IgG Ab [Titer] in Serum	Both
9784-0	Ehrlichia chaffeensis IgM Ab [Titer] in Serum	Both
25907-7	Elastase.pancreatic [Mass/mass] in Stool	Both
14708-2	Endomysium Ab [Titer] in Serum	Both
10362-2	Endomysium IgA Ab [Presence] in Serum	Both
10863-9	Endomysium IgA Ab [Titer] in Serum	Both
27038-9	Endomysium IgA Ab [Titer] in Serum by Immunofluorescence	Both
20797-7	Endotoxin identified in Unspecified Specimen	Both
6110-1	English Plantain IgE Ab [Units/volume] in Serum	Both

15060-7	Enolase.neuron specific [Mass/volume] in Serum or Plasma	Both
9522-4	Entamoeba histolytica IgG Ab [Units/volume] in Serum by Immunoassay	Both
675-9	Enterobius vermicularis [Presence] in Unspecified specimen by Pinworm exam	Both
29591-5	Enterovirus RNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
26449-9	Eosinophils [#/volume] in Blood	Observation
711-2	Eosinophils [#/volume] in Blood by Automated count	Both
48049-1	Eosinophils [Presence] in Stool by Wright stain	Both
49839-4	Eosinophils [Presence] in Urine sediment by Wright stain	Both
12210-1	Eosinophils/100 leukocytes in Urine sediment by Manual count	Both
30339-6	Epstein Barr virus capsid IgG Ab [Presence] in Serum	Both
24114-1	Epstein Barr virus capsid IgG Ab [Presence] in Serum by Immunoassay	Both
40750-2	Epstein Barr virus capsid IgG Ab [Presence] in Serum by Immunofluorescence	Both
5158-1	Epstein Barr virus capsid IgG Ab [Titer] in Serum by Immunofluorescence	Both
7885-7	Epstein Barr virus capsid IgG Ab [Units/volume] in Serum	Both
5157-3	Epstein Barr virus capsid IgG Ab [Units/volume] in Serum by Immunoassay	Both
30340-4	Epstein Barr virus capsid IgM Ab [Presence] in Serum	Both
24115-8	Epstein Barr virus capsid IgM Ab [Presence] in Serum by Immunoassay	Both
5160-7	Epstein Barr virus capsid IgM Ab [Titer] in Serum by Immunofluorescence	Both
7886-5	Epstein Barr virus capsid IgM Ab [Units/volume] in Serum	Both
5159-9	Epstein Barr virus capsid IgM Ab [Units/volume] in Serum by Immunoassay	Both
32585-2	Epstein Barr virus DNA [#/volume] (viral load) in Unspecified specimen by Probe & target amplification	Both
5005-4	Epstein Barr virus DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
14083-0	Epstein Barr virus early Ab [Titer] in Serum by Immunofluorescence	Both
40752-8	Epstein Barr virus early IgG Ab [Presence] in Serum by Immunoassay	Both
24007-7	Epstein Barr virus early IgG Ab [Units/volume] in Serum	Both
56598-6	Epstein Barr virus early IgM Ab [Units/volume] in Serum by Immunoassay	Both
22296-8	Epstein Barr virus nuclear Ab [Presence] in Serum	Both
22297-6	Epstein Barr virus nuclear Ab [Titer] in Serum	Both
21260-5	Epstein Barr virus nuclear Ab [Titer] in Serum by Immunofluorescence	Both
7883-2	Epstein Barr virus nuclear IgG Ab [Presence] in Serum	Both
5156-5	Epstein Barr virus nuclear IgG Ab [Presence] in Serum by Immunoassay	Both
31374-2	Epstein Barr virus nuclear IgG Ab [Units/volume] in Serum	Both
30083-0	Epstein Barr virus nuclear IgG Ab [Units/volume] in Serum by Immunoassay	Both

222.5		
30341-2	Erythrocyte sedimentation rate	Both
4537-7	Erythrocyte sedimentation rate by Westergren method	Both
789-8	Erythrocytes [#/volume] in Blood by Automated count	Observation
15061-5	Erythropoietin (EPO) [Units/volume] in Serum or Plasma	Both
21262-1	Escherichia coli shiga-like [Presence] in Stool by Immunoassay	Both
2243-4	Estradiol (E2) [Mass/volume] in Serum or Plasma	Both
35384-7	Estradiol (E2) [Mass/volume] in Serum or Plasma by High sensitivity method	Both
2251-7	Estriol (E3) [Mass/volume] in Serum or Plasma	Both
2250-9	Estriol (E3).unconjugated [Mass/volume] in Serum or Plasma	Both
2254-1	Estrogen [Mass/volume] in Serum or Plasma	Observation
2258-2	Estrone (E1) [Mass/volume] in Serum or Plasma	Both
5640-8	Ethanol [Mass/volume] in Blood	Both
5643-2	Ethanol [Mass/volume] in Serum or Plasma	Both
5645-7	Ethanol [Mass/volume] in Urine	Both
5639-0	Ethanol [Presence] in Blood	Both
5644-0	Ethanol [Presence] in Urine	Both
3616-0	Ethosuximide [Mass/volume] in Serum or Plasma	Both
45324-1	Ethyl glucuronide [Mass/volume] in Urine	Both
58375-7	Ethyl glucuronide [Presence] in Urine by Screen method	Both
5646-5	Ethylene glycol [Mass/volume] in Serum or Plasma	Both
6096-2	European house dust mite IgE Ab [Units/volume] in Serum	Both
50544-6	Everolimus [Mass/volume] in Blood	Both
24476-4	F2 gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
24475-6	F2 gene p.G20210A [Presence] in Blood or Tissue by Molecular genetics method	Both
21667-1	F5 gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
1558-6	Fasting glucose [Mass/volume] in Serum or Plasma	Both
16142-2	Fat [Mass/time] in 24 hour Stool	Both
2270-7	Fat [Presence] in Stool	Both
12598-9	Fat.neutral [Presence] in Stool	Both
11235-9	Fentanyl [Presence] in Urine	Both
2276-4	Ferritin [Mass/volume] in Serum or Plasma	Both
29280-5	Fibrin D-dimer [Presence] in Platelet poor plasma by Latex agglutination	Both
7799-0	Fibrin D-dimer [Units/volume] in Platelet poor plasma	Both
1133-0	Fibrario diffici (offics) volume jiir riutelet poor plasma	טטנוו

48066-5	Fibrin D-dimer DDU [Mass/volume] in Platelet poor plasma	Both
48058-2	Fibrin D-dimer DDU [Mass/volume] in Platelet poor plasma by Immunoassay	Both
48065-7	Fibrin D-dimer FEU [Mass/volume] in Platelet poor plasma	Both
3255-7	Fibrinogen [Mass/volume] in Platelet poor plasma by Coagulation assay	Both
3256-5	Fibrinogen Ag [Mass/volume] in Platelet poor plasma by Immunologic method	Both
48039-2	Fibronectin.fetal [Presence] in Unspecified specimen	Both
20404-0	Fibronectin.fetal [Presence] in Vaginal fluid	Both
33719-6	Flow cytometry study	Both
21759-6	FMR1 gene CGG repeats [Presence] in Blood or Tissue by Molecular genetics method	Both
36913-2	FMR1 gene mutation analysis in Blood or Tissue by Molecular genetics method Narrative	Both
2282-2	Folate [Mass/volume] in Blood	Both
2283-0	Folate [Mass/volume] in Red Blood Cells	Both
2284-8	Folate [Mass/volume] in Serum or Plasma	Both
15067-2	Follitropin [Units/volume] in Serum or Plasma	Both
15218-1	Food Allergen Mix 2 (Cod+Blue Mussel+Shrimp+Salmon+Tuna) IgE Ab [Presence] in Serum by Multidisk	Both
21760-4	FRAXE gene CGG repeats [Presence] in Blood or Tissue by Molecular genetics method	Both
721-1	Free Hemoglobin [Mass/volume] in Plasma	Both
4635-9	Free Hemoglobin [Mass/volume] in Serum	Both
15069-8	Fructosamine [Moles/volume] in Serum or Plasma	Both
13943-6	Fructose [Presence] in Semen	Observation
601-5	Fungus identified in Blood by Culture	Both
15378-3	Fungus identified in Isolate by Culture	Both
575-1	Fungus identified in Skin by Culture	Both
580-1	Fungus identified in Unspecified specimen by Culture	Both
21003-9	Fungus identified in Unspecified specimen by Fungus stain	Both
6121-8	Fusarium moniliforme IgE Ab [Units/volume] in Serum	Both
9738-6	Gabapentin [Mass/volume] in Serum or Plasma	Both
44099-0	Galactomannan Ag [Presence] in Serum or Plasma by Immunoassay	Both
35383-9	Galactomannan Ag [Units/volume] in Serum or Plasma	Both
44357-2	Galactomannan Ag [Units/volume] in Serum or Plasma by Immunoassay	Both
62419-7	Galectin 3 [Mass/volume] in Serum or Plasma	Both
2324-2	Gamma glutamyl transferase [Enzymatic activity/volume] in Serum or Plasma	Both
6410-5	Gardnerella vaginalis rRNA [Presence] in Genital specimen by DNA probe	Both

2222.2	Contain [Massa/values] in Comun on Discuss	5 .:
2333-3	Gastrin [Mass/volume] in Serum or Plasma	Both
35668-3	Gentamicin [Mass/volume] in Serum or Plasma	Both
3663-2	Gentamicin [Mass/volume] in Serum or Plasmapeak	Both
3665-7	Gentamicin [Mass/volume] in Serum or Plasmatrough	Both
6412-1	Giardia lamblia Ag [Presence] in Stool by Immunoassay	Both
48060-8	Giardia lamblia+Cryptosporidium sp Ag [Presence] in Stool	Both
7893-1	Gliadin Ab [Units/volume] in Serum	Both
6924-5	Gliadin IgA Ab [Units/volume] in Serum	Both
20495-8	Gliadin IgA Ab [Units/volume] in Serum by Immunoassay	Both
5170-6	Gliadin IgG Ab [Units/volume] in Serum	Both
20496-6	Gliadin IgG Ab [Units/volume] in Serum by Immunoassay	Both
30343-8	Glomerular basement membrane IgG Ab [Units/volume] in Serum by Immunoassay	Both
2339-0	Glucose [Mass/volume] in Blood	Both
2344-0	Glucose [Mass/volume] in Body fluid	Both
32016-8	Glucose [Mass/volume] in Capillary blood	Both
41653-7	Glucose [Mass/volume] in Capillary blood by Glucometer	Both
2342-4	Glucose [Mass/volume] in Cerebral spinal fluid	Both
2345-7	Glucose [Mass/volume] in Serum or Plasma	Both
1501-6	Glucose [Mass/volume] in Serum or Plasma1 hour post 100 g glucose PO	Both
1507-3	Glucose [Mass/volume] in Serum or Plasma1 hour post 75 g glucose PO	Both
20438-8	Glucose [Mass/volume] in Serum or Plasma1 hour post dose glucose	Both
10449-7	Glucose [Mass/volume] in Serum or Plasma1 hour post meal	Both
12646-6	Glucose [Mass/volume] in Serum or Plasma1 hour post XXX challenge	Both
1514-9	Glucose [Mass/volume] in Serum or Plasma2 hours post 100 g glucose PO	Both
1518-0	Glucose [Mass/volume] in Serum or Plasma2 hours post 75 g glucose PO	Both
20436-2	Glucose [Mass/volume] in Serum or Plasma2 hours post dose glucose	Both
1521-4	Glucose [Mass/volume] in Serum or Plasma2 hours post meal	Both
2350-7	Glucose [Mass/volume] in Urine	Both
5792-7	Glucose [Mass/volume] in Urine by Test strip	Both
2349-9	Glucose [Presence] in Urine	Both
25428-4	Glucose [Presence] in Urine by Test strip	Both
32546-4	Glucose-6-Phosphate dehydrogenase [Enzymatic activity/mass] in Red Blood Cells	Both
	Glucose-6-Phosphate dehydrogenase [Enzymatic activity/mass] in Red Blood Cells	
2357-2	Glucose-o-rhosphate denydrogenase [Enzymatic activity/volume] in Red Blood Cells	Both

2356-4	Glucose-6-Phosphate dehydrogenase [Presence] in Red Blood Cells	Both
13926-1	Glutamate decarboxylase 65 Ab [Units/volume] in Serum	Both
56540-8	Glutamate decarboxylase 65 Ab [Units/volume] in Serum by Immunoassay	Both
6125-9	Gluten IgE Ab [Units/volume] in Serum	Both
63091-3	Gluten IgG Ab [Mass/volume] in Serum	Both
6129-1	Goose feather IgE Ab [Units/volume] in Serum	Both
6156-4	Goosefoot IgE Ab [Units/volume] in Serum	Both
15284-3	Grey Alder IgE Ab [Units/volume] in Serum	Both
7110-0	Groundsel Tree IgE Ab [Units/volume] in Serum	Both
6113-5	Gum-Tree IgE Ab [Units/volume] in Serum	Both
29559-2	Haemophilus ducreyi DNA [Presence] in Unspecified specimen by Probe and target amplification	Both
11256-5	Haemophilus influenzae B IgG Ab [Mass/volume] in Serum	Both
4542-7	Haptoglobin [Mass/volume] in Serum or Plasma	Both
6136-6	Hazelnut IgE Ab [Units/volume] in Serum	Both
6137-4	Hazelnut Pollen IgE Ab [Units/volume] in Serum	Both
21687-9	HBA1 gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
29891-9	Helicobacter pylori [Presence] in Stomach by urea breath test	Both
22310-7	Helicobacter pylori Ab [Presence] in Serum	Both
7900-4	Helicobacter pylori Ab [Units/volume] in Serum	Both
31843-6	Helicobacter pylori Ag [Presence] in Stool	Both
17780-8	Helicobacter pylori Ag [Presence] in Stool by Immunoassay	Both
7901-2	Helicobacter pylori IgA Ab [Units/volume] in Serum	Both
6420-4	Helicobacter pylori IgA Ab [Units/volume] in Serum by Immunoassay	Both
16126-5	Helicobacter pylori IgG Ab [Presence] in Serum	Both
17859-0	Helicobacter pylori IgG Ab [Presence] in Serum or Plasma by Immunoassay	Both
7902-0	Helicobacter pylori IgG Ab [Units/volume] in Serum	Both
5176-3	Helicobacter pylori IgG Ab [Units/volume] in Serum by Immunoassay	Both
5177-1	Helicobacter pylori IgM Ab [Units/volume] in Serum by Immunoassay	Both
6138-2	Helminthosporium halodes IgE Ab [Units/volume] in Serum	Both
20570-8	Hematocrit [Volume Fraction] of Blood	Both
11153-4	Hematocrit [Volume Fraction] of Body fluid	Both
718-7	Hemoglobin [Mass/volume] in Blood	Both
48035-0	Hemoglobin [Presence] in Cerebral spinal fluid	Both

55454-3	Hemoglobin A1c in Blood	Order
17856-6	Hemoglobin A1c/Hemoglobin.total in Blood by HPLC	Both
32140-6	Hemoglobin F [Presence] in Blood by Kleihauer-Betke method	Both
4621-9	Hemoglobin S [Presence] in Blood	Both
6864-3	Hemoglobin S [Presence] in Blood by Solubility test	Both
4625-0	Hemoglobin S/Hemoglobin.total in Blood	Observation
2334-1	Hemoglobin.gastrointestinal [Presence] in Gastric fluid	Both
2335-8	Hemoglobin.gastrointestinal [Presence] in Stool	Both
29771-3	Hemoglobin.gastrointestinal [Presence] in Stool by Immunologic method	Both
3274-8	Heparin unfractionated [Units/volume] in Platelet poor plasma by Chromogenic method	Both
13951-9	Hepatitis A virus Ab [Presence] in Serum by Immunoassay	Both
5183-9	Hepatitis A virus Ab [Units/volume] in Serum by Immunoassay	Both
22314-9	Hepatitis A virus IgM Ab [Presence] in Serum	Both
13950-1	Hepatitis A virus IgM Ab [Presence] in Serum or Plasma by Immunoassay	Both
22315-6	Hepatitis A virus IgM Ab [Units/volume] in Serum	Both
5181-3	Hepatitis A virus IgM Ab [Units/volume] in Serum by Immunoassay	Both
16933-4	Hepatitis B virus core Ab [Presence] in Serum	Both
47440-3	Hepatitis B virus core Ab [Presence] in Serum from donor	Both
13952-7	Hepatitis B virus core Ab [Presence] in Serum or Plasma by Immunoassay	Both
5187-0	Hepatitis B virus core Ab [Units/volume] in Serum by Immunoassay	Both
31204-1	Hepatitis B virus core IgM Ab [Presence] in Serum	Both
24113-3	Hepatitis B virus core IgM Ab [Presence] in Serum or Plasma by Immunoassay	Both
5185-4	Hepatitis B virus core IgM Ab [Units/volume] in Serum by Immunoassay	Both
29615-2	Hepatitis B virus DNA [#/volume] (viral load) in Serum or Plasma by Probe and target amplification	Both
11258-1	Hepatitis B virus DNA [Units/volume] in Serum	Both
13953-5	Hepatitis B virus e Ab [Presence] in Serum by Immunoassay	Both
31844-4	Hepatitis B virus e Ag [Presence] in Serum	Both
13954-3	Hepatitis B virus e Ag [Presence] in Serum by Immunoassay	Both
5191-2	Hepatitis B virus e Ag [Units/volume] in Serum by Immunoassay	Both
22322-2	Hepatitis B virus surface Ab [Presence] in Serum	Both
10900-9	Hepatitis B virus surface Ab [Presence] in Serum by Immunoassay	Both
16935-9	Hepatitis B virus surface Ab [Units/volume] in Serum	Both
5193-8	Hepatitis B virus surface Ab [Units/volume] in Serum by Immunoassay	Both

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5194-6	Hepatitis B virus surface Ab [Units/volume] in Serum by Radioimmunoassay (RIA)	Both
5195-3	Hepatitis B virus surface Ag [Presence] in Serum	Both
47364-5	Hepatitis B virus surface Ag [Presence] in Serum from donor by Immunoassay	Both
5196-1	Hepatitis B virus surface Ag [Presence] in Serum or Plasma by Immunoassay	Both
7905-3	Hepatitis B virus surface Ag [Presence] in Serum or Plasma by Neutralization test	Both
16128-1	Hepatitis C virus Ab [Presence] in Serum	Both
5199-5	Hepatitis C virus Ab [Presence] in Serum by Immunoblot (IB)	Both
47441-1	Hepatitis C virus Ab [Presence] in Serum from donor	Both
13955-0	Hepatitis C virus Ab [Presence] in Serum or Plasma by Immunoassay	Both
5198-7	Hepatitis C virus Ab [Units/volume] in Serum by Immunoassay	Both
48159-8	Hepatitis C virus Ab Signal/Cutoff in Serum or Plasma by Immunoassay	Observation
49846-9	Hepatitis C virus Ag [Presence] in Blood or Marrow from donor	Both
32286-7	Hepatitis C virus genotype [Identifier] in Serum or Plasma by Probe and target amplification method	Both
20416-4	Hepatitis C virus RNA [#/volume] (viral load) in Serum or Plasma by Probe and target amplification	Both
47252-2	Hepatitis C virus RNA [Log #/volume] (viral load) in Serum or Plasma by Probe and target amplification	Both
38180-6	Hepatitis C virus RNA [log units/volume] (viral load) in Serum or Plasma by Probe & target amplification	Both
11259-9	Hepatitis C virus RNA [Presence] in Serum or Plasma by Probe and target amplification method	Both
11011-4	Hepatitis C virus RNA [Units/volume] (viral load) in Serum or Plasma by Probe and target amplification	Both
22330-5	Hepatitis D virus Ab [Units/volume] in Serum	Both
17850-9	Herpes simplex virus 1 IgG Ab [Presence] in Serum	Both
51916-5	Herpes simplex virus 1 IgG Ab [Presence] in Serum by Immunoassay	Both
5206-8	Herpes simplex virus 1 IgG Ab [Units/volume] in Serum by Immunoassay	Both
50758-2	Herpes simplex virus 1 IgM Ab [Titer] in Serum by Immunofluorescence	Both
20444-6	Herpes simplex virus 1+2 DNA [Presence] in Unspecified specimen by Probe and target amplification	Both
49848-5	Herpes simplex virus 1+2 IgG Ab [Presence] in Serum by Immunoblot (IB)	Both
27948-9	Herpes simplex virus 1+2 IgG Ab [Units/volume] in Serum by Immunoassay	Both
41399-7	Herpes simplex virus 1+2 IgM Ab [Units/volume] in Serum by Immunoassay	Both
17851-7	Herpes simplex virus 2 IgG Ab [Presence] in Serum	Both
43180-9	Herpes simplex virus 2 IgG Ab [Presence] in Serum by Immunoassay	Both
5209-2	Herpes simplex virus 2 IgG Ab [Units/volume] in Serum by Immunoassay	Both
26927-4	Herpes simplex virus 2 IgM Ab [Titer] in Serum by Immunofluorescence	Both
5202-7	Herpes simplex virus Ab [Units/volume] in Serum by Immunoassay	Both
62454-4	Herpes simplex virus and Varicella zoster virus identified in Unspecified specimen by Organism specific culture	Both

5856-0	Herpes simplex virus identified in Genital specimen by Organism specific culture	Both
5859-4	Herpes simplex virus identified in Unspecified specimen by Organism specific culture	Both
35423-3	Herpes simplex virus identified in Vaginal fluid by Organism specific culture	Both
25435-9	Herpes simplex virus IgM Ab [Presence] in Serum	Both
40729-6	Herpes simplex virus IgM Ab [Presence] in Serum by Immunoassay	Both
5211-8	Herpes virus 6 IgG Ab [Units/volume] in Serum	Both
31418-7	Heterophile Ab [Presence] in Serum	Both
5213-4	Heterophile Ab [Presence] in Serum by Latex agglutination	Both
32632-2	HEXA gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
34519-9	HFE gene mutation analysis in Blood or Tissue by Molecular genetics method Narrative	Both
21694-5	HFE gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
21695-2	HFE gene p.C282Y [Presence] in Blood or Tissue by Molecular genetics method	Both
29996-6	Histone IgG Ab [Units/volume] in Serum by Immunoassay	Both
5218-3	Histoplasma capsulatum Ab [Presence] in Serum by Immune diffusion (ID)	Both
19108-0	Histoplasma capsulatum Ag [Presence] in Serum	Both
44525-4	Histoplasma capsulatum Ag [Presence] in Serum by Immunoassay	Both
6428-7	Histoplasma capsulatum Ag [Units/volume] in Serum by Immunoassay	Both
19107-2	Histoplasma capsulatum Ag [Units/volume] in Serum by Radioimmunoassay (RIA)	Both
44528-8	Histoplasma capsulatum M Ab [Presence] in Serum	Both
7917-8	HIV 1 Ab [Presence] in Serum	Both
29893-5	HIV 1 Ab [Presence] in Serum by Immunoassay	Both
5221-7	HIV 1 Ab [Presence] in Serum by Immunoblot (IB)	Both
24012-7	HIV 1 Ag [Presence] in Serum	Both
5222-5	HIV 1 Ag [Presence] in Serum by Immunoassay	Both
20447-9	HIV 1 RNA [#/volume] (viral load) in Serum or Plasma by Probe and target amplification method	Both
25836-8	HIV 1 RNA [#/volume] (viral load) in Unspecified specimen by Probe and target amplification method	Both
29539-4	HIV 1 RNA [Log #/volume] (viral load) in Plasma by Probe and signal amplification method	Both
29541-0	HIV 1 RNA [Log #/volume] (viral load) in Plasma by Probe and target amplification method	Both
25835-0	HIV 1 RNA [Presence] in Serum or Plasma by Probe and target amplification method	Both
23876-6	HIV 1 RNA [Units/volume] (viral load) in Plasma by Probe and signal amplification method	Both
7918-6	HIV 1+2 Ab [Presence] in Serum	Both
44533-8	HIV 1+2 Ab [Presence] in Serum from donor	Both
31201-7	HIV 1+2 Ab [Presence] in Serum or Plasma by Immunoassay	Both

49580-4	HIV 1+2 Ab [Presence] in Unspecified specimen by Rapid test	Both
22357-8	HIV 1+2 Ab [Units/volume] in Serum	Both
48345-3	HIV 1+O+2 Ab [Presence] in Serum or Plasma	Both
48346-1	HIV 1+O+2 Ab [Units/volume] in Serum or Plasma	Both
30361-0	HIV 2 Ab [Presence] in Serum by Immunoassay	Both
5225-8	HIV 2 Ab [Presence] in Serum by Immunoblot (IB)	Both
49573-9	HIV genotype [Susceptibility] in Isolate by Genotype method Narrative	Both
33630-5	HIV protease gene mutations detected [Identifier]	Both
46994-0	HLA-A+B+C (class I) Ab in Serum	Both
42358-2	HLA-B*5701 [Presence] in Unspecified specimen	Both
4821-5	HLA-B27 [Presence]	Both
26028-1	HLA-B27 [Presence] by Flow cytometry (FC)	Both
26043-0	HLA-B27 [Presence] by Probe and target amplification method	Both
2428-1	Homocysteine [Mass/volume] in Serum or Plasma	Both
13965-9	Homocysteine [Moles/volume] in Serum or Plasma	Both
38486-7	Homocystine [Presence] in Dried blood spot	Observation
6844-5	Honey Bee IgE Ab [Units/volume] in Serum	Both
6143-2	Horse dander IgE Ab [Units/volume] in Serum	Both
9828-5	House dust Greer IgE Ab [Units/volume] in Serum	Both
22070-7	HP gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
30167-1	HPVs 16+18+31+33+35+39+45+51+52+56+58+59+68 DNA in Cervix by Probe and signal amplification	Both
22362-8	HTLV 1+2 Ab [Presence] in Serum	Both
29901-6	HTLV 1+2 Ab [Presence] in Serum by Immunoassay	Both
16982-1	HTLV 1+2 Ab [Presence] in Serum by Immunoblot (IB)	Both
44538-7	HTLV 1+2 Ab [Presence] in Serum from donor	Both
55180-4	Human epididymis protein 4 [Moles/volume] in Serum	Both
21440-3	Human papilloma virus 16+18+31+33+35+45+51+52+56 DNA [Presence] in Cervix by DNA probe	Both
71431-1	Human papilloma virus 31+33+35+39+45+51+52+56+58+59+66+68 DNÁ [Presence] in Cervix by Probe and target amplification method	Both
21441-1	Human papilloma virus 6+11+42+43+44 DNA [Presence] in Cervix by DNA probe	Both
42481-2	Human papilloma virus 6+11+42+43+44 DNA [Presence] in Cervix by Probe and signal amplification	Both
44547-8	Human papilloma virus DNA [Presence] in Unspecified specimen by Probe and signal amplification	Both
48560-7	Human papilloma virus genotype [Identifier] in Unspecified specimen by Probe and target amplification	Both
	Hydrocodone [Presence] in Urine	Both

9834-3	Hydromorphone [Presence] in Urine	Both
2458-8	IgA [Mass/volume] in Serum or Plasma	Both
2460-4	IgD [Mass/volume] in Serum	Both
2462-0	IgE [Mass/volume] in Serum	Both
19113-0	IgE [Units/volume] in Serum or Plasma	Both
2464-6	IgG [Mass/volume] in Cerebral spinal fluid	Both
2465-3	IgG [Mass/volume] in Serum or Plasma	Both
27831-7	Immune complex [Units/volume] in Serum or Plasma by C1q binding assay	Both
49275-1	Immunofixation [interpretation] for Serum or Plasma Narrative	Observation
13440-3	Immunofixation [interpretation] for Urine	Observation
17793-1	Immunoglobulin light chains [Mass/volume] in 24 hour Urine	Both
11050-2	Immunoglobulin light chains.kappa [Mass/volume] in Serum	Both
36916-5	Immunoglobulin light chains.kappa.free [Mass/volume] in Serum	Both
11051-0	Immunoglobulin light chains.lambda [Mass/volume] in Serum	Both
33944-0	Immunoglobulin light chains.lambda.free [Mass/volume] in Serum or Plasma	Both
1003-3	Indirect antiglobulin test.complement specific reagent [Presence] in Serum or Plasma	Observation
5862-8	Influenza virus A Ag [Presence] in Unspecified specimen by Immunoassay	Both
5863-6	Influenza virus A Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
72366-8	Influenza virus A and B Ag [Identifier] in Nose by Rapid immunoassay	Both
31437-7	Influenza virus A IgG Ab [Units/volume] in Serum	Both
24015-0	Influenza virus A+B Ag [Presence] in Unspecified specimen	Both
6437-8	Influenza virus A+B Ag [Presence] in Unspecified specimen by Immunoassay	Both
6438-6	Influenza virus A+B Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
48509-4	Influenza virus A+B RNA [Identifier] in Unspecified specimen by Probe & target amplification	Both
46083-2	Influenza virus B Ag [Presence] in Nasopharynx by Immunoassay	Both
5866-9	Influenza virus B Ag [Presence] in Unspecified specimen by Immunoassay	Both
17015-9	Influenza virus B IgG Ab [Units/volume] in Serum	Both
6604-3	Influenza virus identified in Unspecified specimen by Organism specific culture	Both
23883-2	Inhibin A [Mass/volume] in Serum	Both
34319-4	Inhibin B [Mass/volume] in Serum or Plasma	Both
20448-7	Insulin [Units/volume] in Serum or Plasma	Both
8072-1	Insulin Ab [Units/volume] in Serum	Both
6901-3	Insulin Free [Units/volume] in Serum or Plasma	Both

2483-6	Insulin-like growth factor binding protein 3 [Mass/volume] in Serum or Plasma	Both
2483-6	Insulin-like growth factor-I [Mass/volume] in Serum or Plasma [Insulin-like growth factor-I [Mass/volume] in Serum or Plasma	
		Both
9537-2	Intrinsic factor blocking Ab [Presence] in Serum by Radioimmunoassay (RIA)	Both
2494-3	Iodine [Mass/volume] in Serum or Plasma	Both
2498-4	Iron [Mass/volume] in Serum or Plasma	Both
2500-7	Iron binding capacity [Mass/volume] in Serum or Plasma	Both
2501-5	Iron binding capacity.unsaturated [Mass/volume] in Serum or Plasma	Both
31209-0	Islet cell 512 Ab [Units/volume] in Serum	Both
5669-7	Isopropanol [Mass/volume] in Serum or Plasma	Both
10853-0	Isospora belli [Presence] in Unspecified specimen by Acid fast stain.Kinyoun modified	Both
6151-5	Italian Cypress IgE Ab [Units/volume] in Serum	Both
43399-5	JAK2 gene p.V617F [Presence] in Blood or Tissue by Molecular genetics method	Both
5234-0	Jo-1 extractable nuclear Ab [Presence] in Serum by Immunoassay	Both
11565-9	Jo-1 extractable nuclear Ab [Units/volume] in Serum	Both
6152-3	Johnson grass IgE Ab [Units/volume] in Serum	Both
48344-6	Kaolin activated time in Platelet poor plasma	Both
33773-3	Karyotype [Identifier] in Amniotic fluid Nominal	Both
29770-5	Karyotype [Identifier] in Blood or Tissue Nominal	Both
33893-9	Karyotype [Identifier] in Bone marrow Nominal	Both
6153-1	Kentucky blue grass IgE Ab [Units/volume] in Serum	Both
33058-9	Ketones [Mass/volume] in Serum or Plasma	Both
5797-6	Ketones [Mass/volume] in Urine by Test strip	Both
33903-6	Ketones [Presence] in Urine	Both
59297-2	Lacosamide [Mass/volume] in Serum or Plasma	Both
7445-0	Lactalbumin alpha IgE Ab [Units/volume] in Serum	Both
14118-4	Lactate [Mass/volume] in Serum or Plasma	Both
32693-4	Lactate [Moles/volume] in Blood	Both
2524-7	Lactate [Moles/volume] in Serum or Plasma	Both
14803-1	Lactate dehydrogenase [Enzymatic activity/volume] in Body fluid by Lactate to pyruvate reaction	Both
60017-1	Lactate dehydrogenase [Enzymatic activity/volume] in Body fluid by Pyruvate to lactate reaction	Both
14804-9	Lactate dehydrogenase [Enzymatic activity/volume] in Serum or Plasma by Lactate to pyruvate reaction	Both
	Lactate dehydrogenase [Enzymatic activity/volume] in Serum or Plasma by Pyruvate to lactate reaction	
14805-6		Both
40703-1	Lactoferrin [Presence] in Stool by Immunoassay	Both

6948-4	Lamotrigine [Mass/volume] in Serum or Plasma	Both
6158-0	Latex IgE Ab [Units/volume] in Serum	Both
5671-3	Lead [Mass/volume] in Blood	Both
10912-4	Lead [Mass/volume] in Serum or Plasma	Both
14976-5	Lecithin/Sphingomyelin [Ratio] in Amniotic fluid	Both
38901-5	Leflunomide [Mass/volume] in Serum or Plasma	Both
41499-5	Legionella pneumophila 1 Ag [Presence] in Urine by Immunoassay	Both
49914-5	Legionella pneumophila 1+2+3+4+5+6 IgM Ab [Presence] in Serum	Both
30046-7	Legionella pneumophila Ab [Units/volume] in Serum by Immunoassay	Both
588-4	Legionella pneumophila Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
31870-9	Legionella pneumophila Ag [Presence] in Urine	Both
6447-7	Legionella pneumophila Ag [Presence] in Urine by Immunoassay	Both
6448-5	Legionella pneumophila Ag [Presence] in Urine by Radioimmunoassay (RIA)	Both
593-4	Legionella sp identified in Unspecified specimen by Organism specific culture	Both
6239-8	Lenscale IgE Ab [Units/volume] in Serum	Both
21365-2	Leptin [Mass/volume] in Serum or Plasma	Both
7959-0	Leptospira sp Ab [Titer] in Serum	Both
15112-6	Leukocyte phosphatase [Units/volume] in Leukocytes	Both
26464-8	Leukocytes [#/volume] in Blood	Observation
6690-2	Leukocytes [#/volume] in Blood by Automated count	Observation
13349-6	Leukocytes [#/volume] in Stool by Manual count	Observation
13655-6	Leukocytes [Presence] in Stool by Light microscopy	Observation
30471-7	Levetiracetam [Mass/volume] in Serum or Plasma	Both
3714-3	Lidocaine [Mass/volume] in Serum or Plasma	Both
15212-4	Lipase [Enzymatic activity/volume] in Body fluid	Both
3040-3	Lipase [Enzymatic activity/volume] in Serum or Plasma	Both
10835-7	Lipoprotein a [Mass/volume] in Serum or Plasma	Both
43583-4	Lipoprotein a [Moles/volume] in Serum or Plasma	Both
3719-2	Lithium [Mass/volume] in Serum or Plasma	Both
14334-7	Lithium [Moles/volume] in Serum or Plasma	Both
32220-6	Liver kidney microsomal 1 Ab [Units/volume] in Serum	Both
9838-4	Liver kidney microsomal Ab [Titer] in Serum by Immunofluorescence	Both
6165-5	Lobster IgE Ab [Units/volume] in Serum	Both

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15191-0	Lupus anticoagulant neutralization dilute phospholipid [Presence] in Platelet poor plasma	Both
3282-1	Lupus anticoagulant neutralization hexagonal phase phospholipid in Platelet poor plasma by Coag assay	Both
3284-7	Lupus anticoagulant neutralization platelet [Time] in Platelet poor plasma by Coagulation assay	Both
10501-5	Lutropin [Units/volume] in Serum or Plasma	Both
29956-0	Lysozyme [Mass/volume] in Body fluid	Both
11183-1	Macadamia IgE Ab [Units/volume] in Serum	Both
24447-5	Magnesium [Mass/time] in 24 hour Urine	Both
26746-8	Magnesium [Mass/volume] in Red Blood Cells	Both
19123-9	Magnesium [Mass/volume] in Serum or Plasma	Both
19124-7	Magnesium [Mass/volume] in Urine	Both
2597-3	Magnesium [Moles/volume] in Red Blood Cells	Both
2601-3	Magnesium [Moles/volume] in Serum or Plasma	Both
7477-3	Mango Pollen IgE Ab [Units/volume] in Serum	Both
6232-3	Marsh Elder IgE Ab [Units/volume] in Serum	Both
12232-5	Measles virus Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
20479-2	Measles virus IgG Ab [Presence] in Serum	Both
35275-7	Measles virus IgG Ab [Presence] in Serum by Immunoassay	Both
5244-9	Measles virus IgG Ab [Units/volume] in Serum by Immunoassay	Both
3746-5	Meperidine [Presence] in Urine	Both
5685-3	Mercury [Mass/volume] in Blood	Both
2609-6	Metanephrines [Mass/time] in 24 hour Urine	Both
3773-9	Methadone [Presence] in Urine	Both
19550-3	Methadone [Presence] in Urine by Screen method	Both
70149-0	Methadone [Presence] in Urine by Screen method >300 ng/mL	Both
5693-7	Methanol [Mass/volume] in Serum or Plasma	Both
3786-1	Methaqualone [Presence] in Urine	Both
2614-6	Methemoglobin/Hemoglobin.total in Blood	Both
35492-8	Methicillin resistant Staphylococcus aureus (MRSA) DNA [Presence] by Probe and target amplification	Both
14836-1	Methotrexate [Moles/volume] in Serum or Plasma	Both
13964-2	Methylmalonate [Moles/volume] in Serum or Plasma	Both
14957-5	Microalbumin [Mass/volume] in Urine	Both
51714-4	Microscopic observation [Identifier] in Blood by Giemsa stain	Both
637-9	Microscopic observation [Identifier] in Blood by Malaria thick smear	Both

10355-6	Microscopic observation [Identifier] in Bone marrow by Wright Giemsa stain	Both
19765-7	Microscopic observation [Identifier] in Cervical or vaginal smear or scraping by Cyto stain	Both
10524-7	Microscopic observation [Identifier] in Cervix by Cyto stain	Both
18500-9	Microscopic observation [Identifier] in Cervix by Cyto stain.thin prep	Both
49050-8	Microscopic observation [Identifier] in Endocervical brush by Cyto stain	Both
10526-2	Microscopic observation [Identifier] in Sputum by Cyto stain	Both
6473-3	Microscopic observation [Identifier] in Tissue by Trichrome stain	Both
11545-1	Microscopic observation [Identifier] in Unspecified specimen by Acid fast stain	Both
655-1	Microscopic observation [Identifier] in Unspecified specimen by Acid fast stain.Kinyoun modified	Both
10525-4	Microscopic observation [Identifier] in Unspecified specimen by Cyto stain	Both
664-3	Microscopic observation [Identifier] in Unspecified specimen by Gram stain	Both
666-8	Microscopic observation [Identifier] in Unspecified specimen by India ink prep	Both
667-6	Microscopic observation [Identifier] in Unspecified specimen by KOH preparation	Both
20431-3	Microscopic observation [Identifier] in Unspecified specimen by Smear	Both
680-9	Microscopic observation [Identifier] in Unspecified specimen by Wet preparation	Both
681-7	Microscopic observation [Identifier] in Unspecified specimen by Wright stain	Both
11070-0	Microscopic observation [Identifier] in Urine by Cyto stain	Both
32819-5	Microsporidia identified in Stool by Trichrome stain	Both
6174-7	Milk IgE Ab [Units/volume] in Serum	Both
17284-1	Mitochondria Ab [Presence] in Serum by Immunofluorescence	Both
5247-2	Mitochondria Ab [Titer] in Serum by Immunofluorescence	Both
14251-3	Mitochondria M2 IgG Ab [Units/volume] in Serum	Both
16251-1	Morphine [Mass/volume] in Urine by Confirmatory method	Both
3830-7	Morphine [Presence] in Urine	Both
6178-8	Mountain Juniper IgE Ab [Units/volume] in Serum	Both
13317-3	MRSA [Presence] in Unspecified specimen by Organism specific culture	Both
28005-7	MTHFR gene c.677C>T [Presence] in Blood or Tissue by Molecular genetics method	Both
38415-6	MTHFR gene mutation analysis in Blood or Tissue by Molecular genetics method Narrative	Both
21709-1	MTHFR gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
6182-0	Mucor racemosus IgE Ab [Units/volume] in Serum	Both
6183-8	Mugwort IgE Ab [Units/volume] in Serum	Both
38476-8	Mullerian inhibiting substance [Mass/volume] in Serum or Plasma	Both
22415-4	Mumps virus IgG Ab [Presence] in Serum	Both

6476-6	Mumps virus IgG Ab [Presence] in Serum by Immunoassay	Both
7966-5	Mumps virus IgG Ab [Units/volume] in Serum	Both
25418-5	Mumps virus IgG Ab [Units/volume] in Serum by Immunoassay	Both
25419-3	Mumps virus IgM Ab [Units/volume] in Serum by Immunoassay	Both
533-0	Mycobacterium sp identified in Blood by Organism specific culture	Both
543-9	Mycobacterium sp identified in Unspecified specimen by Organism specific culture	Both
23905-3	Mycophenolate [Mass/volume] in Serum or Plasma	Both
42621-3	Mycoplasma hominis DNA [Presence] in Blood by Probe and target amplification method	Both
29257-3	Mycoplasma pneumoniae DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
5255-5	Mycoplasma pneumoniae IgG Ab [Units/volume] in Serum by Immunoassay	Both
5256-3	Mycoplasma pneumoniae IgM Ab [Units/volume] in Serum by Immunoassay	Both
23301-5	Mycoplasma sp DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
2638-5	Myelin basic protein [Mass/volume] in Cerebral spinal fluid	Both
6969-0	Myeloperoxidase Ab [Units/volume] in Serum	Both
46266-3	Myeloperoxidase Ab [Units/volume] in Serum by Immunoassay	Both
53833-0	Myoglobin [Mass/volume] in Blood	Both
2639-3	Myoglobin [Mass/volume] in Serum or Plasma	Both
2641-9	Myoglobin [Mass/volume] in Urine	Both
2640-1	Myoglobin [Presence] in Urine	Both
3834-9	N-acetylprocainamide [Mass/volume] in Serum or Plasma	Both
42637-9	Natriuretic peptide B [Mass/volume] in Blood	Both
30934-4	Natriuretic peptide B [Mass/volume] in Serum or Plasma	Both
33762-6	Natriuretic peptide.B prohormone N-Terminal [Mass/volume] in Serum or Plasma	Both
698-1	Neisseria gonorrhoeae [Presence] in Unspecified specimen by Organism specific culture	Both
47387-6	Neisseria gonorrhoeae DNA [Presence] in Genital specimen by Probe and target amplification method	Both
24111-7	Neisseria gonorrhoeae DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
21416-3	Neisseria gonorrhoeae DNA [Presence] in Urine by Probe and target amplification method	Both
32198-4	Neisseria gonorrhoeae rRNA [Presence] in Cervix by DNA probe	Both
50388-8	Neisseria gonorrhoeae rRNA [Presence] in Cervix by Probe and target amplification method	Both
5028-6	Neisseria gonorrhoeae rRNA [Presence] in Unspecified specimen by DNA probe	Both
43305-2	Neisseria gonorrhoeae rRNA [Presence] in Unspecified specimen by Probe and target amplification	Both
53927-0	Neisseria gonorrhoeae rRNA [Presence] in Urethra by Probe and target amplification method	Both
60256-5	Neisseria gonorrhoeae rRNA [Presence] in Urine by Probe and target amplification method	Both

6186-1	Nettle IgE Ab [Units/volume] in Serum	Both
41617-2	Neutrophil Ab [Presence] in Serum by Flow cytometry (FC)	Both
21023-7	Neutrophil cytoplasmic Ab [Titer] in Serum	Both
48050-9	Neutrophils [Presence] in Stool by Wright stain	Both
18244-4	Niacin [Mass/volume] in Serum or Plasma	Both
3854-7	Nicotine [Mass/volume] in Urine	Both
33716-2	Non-gynecological cytology method study	Both
35622-0	Nordiazepam [Mass/volume] in Serum or Plasma by Screen method	Both
16228-9	Nordiazepam [Mass/volume] in Urine by Confirmatory method	Both
3861-2	Nordiazepam [Presence] in Urine	Both
3872-9	Nortriptyline [Mass/volume] in Serum or Plasma	Both
8061-4	Nuclear Ab [Presence] in Serum	Both
47383-5	Nuclear Ab [Presence] in Serum by Immunoassay	Both
29953-7	Nuclear Ab [Titer] in Serum	Both
5048-4	Nuclear Ab [Titer] in Serum by Immunofluorescence	Both
27200-5	Nuclear Ab [Units/volume] in Serum	Both
5047-6	Nuclear Ab [Units/volume] in Serum by Immunoassay	Both
6190-3	Oat IgE Ab [Units/volume] in Serum	Both
8220-6	Opiates [Mass/volume] in Urine	Both
8214-9	Opiates [Presence] in Meconium	Both
8216-4	Opiates [Presence] in Meconium by Screen method	Both
3879-4	Opiates [Presence] in Urine	Both
18390-5	Opiates [Presence] in Urine by Confirmatory method	Both
19295-5	Opiates [Presence] in Urine by Screen method	Both
70151-6	Opiates [Presence] in Urine by Screen method >300 ng/mL	Both
6194-5	Orange IgE Ab [Units/volume] in Serum	Both
2692-2	Osmolality of Serum or Plasma	Both
2695-5	Osmolality of Urine	Both
2697-1	Osteocalcin [Mass/volume] in Serum or Plasma	Both
10701-1	Ova and parasites identified in Stool by Concentration	Both
10704-5	Ova and parasites identified in Stool by Light microscopy	Both
673-4	Ova and parasites identified in Unspecified specimen by Light microscopy	Both
2700-3	Oxalate [Mass/volume] in Urine	Both

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14862-7	Oxalate [Moles/time] in 24 hour Urine	Both
16201-6	Oxazepam [Mass/volume] in Urine by Confirmatory method	Both
12361-2	Oxazepam [Presence] in Urine	Both
35331-8	Oxcarbazepine [Mass/volume] in Serum or Plasma	Both
16249-5	Oxycodone [Mass/volume] in Urine by Confirmatory method	Both
10998-3	Oxycodone [Presence] in Urine	Both
19643-6	Oxycodone [Presence] in Urine by Confirmatory method	Both
17395-5	Oxymorphone [Mass/volume] in Urine by Confirmatory method	Both
18325-1	Oxymorphone [Presence] in Urine by Confirmatory method	Both
7558-0	Oyster IgE Ab [Units/volume] in Serum	Both
56687-7	Pancreatic islet cell IgG Ab [Titer] in Serum by Immunofluorescence	Both
13327-2	Parainfluenza virus Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
2729-2	Parathyrin related protein [Mass/volume] in Serum or Plasma	Both
2731-8	Parathyrin.intact [Mass/volume] in Serum or Plasma	Both
5271-2	Parietal cell Ab [Titer] in Serum by Immunofluorescence	Both
8087-9	Parietal cell Ab [Units/volume] in Serum	Both
29675-6	Parvovirus B19 IgG Ab [Presence] in Serum	Both
29660-8	Parvovirus B19 IgG Ab [Presence] in Serum by Immunoassay	Both
25630-5	Parvovirus B19 IgG Ab [Titer] in Serum	Both
7983-0	Parvovirus B19 IgG Ab [Units/volume] in Serum	Both
5273-8	Parvovirus B19 IgG Ab [Units/volume] in Serum by Immunoassay	Both
7981-4	Parvovirus B19 IgM Ab [Presence] in Serum	Both
40658-7	Parvovirus B19 IgM Ab [Presence] in Serum by Immunoassay	Both
25631-3	Parvovirus B19 IgM Ab [Titer] in Serum	Both
7984-8	Parvovirus B19 IgM Ab [Units/volume] in Serum	Both
5274-6	Parvovirus B19 IgM Ab [Units/volume] in Serum by Immunoassay	Both
14869-2	Pathologist review of Blood tests	Observation
6204-2	Pea IgE Ab [Units/volume] in Serum	Both
6206-7	Peanut IgE Ab [Units/volume] in Serum	Both
6208-3	Pecan or Hickory Nut IgE Ab [Units/volume] in Serum	Both
6209-1	Pecan or Hickory Tree IgE Ab [Units/volume] in Serum	Both
6851-0	Penicillin G IgE Ab [Units/volume] in Serum	Both
6212-5	Penicillium notatum IgE Ab [Units/volume] in Serum	Both

7369-2	Perennial rye grass IgE Ab [Units/volume] in Serum	Both
2748-2	pH of Body fluid	
	pH of Gastric fluid	Both
2749-0 2755-7	pH of Stool	Both
2756-5	pH of Urine	Both
5803-2	pH of Urine by Test strip	Both Observation
8234-7	Phencyclidine [Presence] in Meconium by Screen method	Both
3936-2	Phencyclidine [Presence] in Urine	Both
19659-2	Phencyclidine [Presence] in Urine by Screen method	Both
14310-7	Phencyclidine [Presence] in Urine by Screen method >25 ng/mL	Both
3948-7	Phenobarbital [Mass/volume] in Serum or Plasma	Both
29573-3	Phenylalanine [Moles/volume] in Dried blood spot	Both
14875-9	Phenylalanine [Moles/volume] in Serum or Plasma	Both
29571-7	Phenylalanine [Presence] in Dried blood spot	Both
3968-5	Phenytoin [Mass/volume] in Serum or Plasma	Both
3969-3	Phenytoin Free [Mass/volume] in Serum or Plasma	Observation
2777-1	Phosphate [Mass/volume] in Serum or Plasma	Both
2778-9	Phosphate [Mass/volume] in Urine	Both
30165-5	Phosphatidylcholine/Albumin [Mass ratio] in Amniotic fluid	Both
32031-7	Phosphatidylserine IgA Ab [Units/volume] in Serum by Immunoassay	Both
9326-0	Phosphatidylserine IgG Ab [Presence] in Serum by Immunoassay	Both
32032-5	Phosphatidylserine IgG Ab [Units/volume] in Serum by Immunoassay	Both
9327-8	Phosphatidylserine IgM Ab [Presence] in Serum by Immunoassay	Both
14246-3	Phosphatidylserine IgM Ab [Units/volume] in Serum	Both
32033-3	Phosphatidylserine IgM Ab [Units/volume] in Serum by Immunoassay	Both
9622-2	Phytonadione [Mass/volume] in Serum or Plasma	Both
6733-0	Pigeon serum Ab [Presence] in Serum by Immune diffusion (ID)	Both
10954-6	Pine Nut IgE Ab [Units/volume] in Serum	Both
7613-3	Pistachio IgE Ab [Units/volume] in Serum	Both
34701-3	Platelet Ab.heparin induced [Presence] in Serum	Both
33594-3	Platelet factor 4 [Presence] in Platelet poor plasma	Both
6002-0	Platelet factor 4 [Units/volume] in Platelet poor plasma	Both
26515-7	Platelets [#/volume] in Blood	Observation

777-3	Platelets [#/volume] in Blood by Automated count	Observation
700-5	Pneumocystis jiroveci Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
5716-6	Polychlorinated biphenyl [Mass/volume] in Serum or Plasma	Both
6219-0	Pork IgE Ab [Units/volume] in Serum	Both
6298-4	Potassium [Moles/volume] in Blood	Both
2823-3	Potassium [Moles/volume] in Serum or Plasma	Both
2828-2	Potassium [Moles/volume] in Urine	Both
6220-8	Potato IgE Ab [Units/volume] in Serum	Both
14338-8	Prealbumin [Mass/volume] in Serum or Plasma	Both
2837-3	Pregnenolone [Mass/volume] in Serum or Plasma	Both
7632-3	Privet IgE Ab [Units/volume] in Serum	Both
3982-6	Procainamide [Mass/volume] in Serum or Plasma	Both
2839-9	Progesterone [Mass/volume] in Serum or Plasma	Both
27882-0	Proinsulin [Moles/volume] in Serum or Plasma	Both
2842-3	Prolactin [Mass/volume] in Serum or Plasma	Both
20568-2	Prolactin [Mass/volume] in Serum or Plasma by Immunoassay	Both
3545-1	Propoxyphene [Mass/volume] in Urine	Both
19141-1	Propoxyphene [Presence] in Urine	Both
19429-0	Propoxyphene [Presence] in Urine by Screen method	Both
17494-6	Prostaglandin F2 alpha [Mass/volume] in Urine	Both
2857-1	Prostate specific Ag [Mass/volume] in Serum or Plasma	Both
35741-8	Prostate specific Ag [Mass/volume] in Serum or Plasma by Detection limit <= 0.01 ng/mL	Both
10886-0	Prostate Specific Ag Free [Mass/volume] in Serum or Plasma	Both
19201-3	Prostate Specific Ag Free [Units/volume] in Serum or Plasma	Both
20420-6	Prostatic acid phosphatase [Mass/volume] in Serum	Both
21482-5	Protein [Mass/volume] in 24 hour Urine	Both
2881-1	Protein [Mass/volume] in Body fluid	Both
2880-3	Protein [Mass/volume] in Cerebral spinal fluid	Both
2885-2	Protein [Mass/volume] in Serum or Plasma	Both
35663-4	Protein [Mass/volume] in unspecified time Urine	Both
2888-6	Protein [Mass/volume] in Urine	Both
6007-9	Protein C [Units/volume] in Platelet poor plasma by Coagulation assay	Both
27818-4	Protein C actual/normal in Platelet poor plasma by Chromogenic method	Observation

27819-2	Protein C actual/normal in Platelet poor plasma by Coagulation assay	Both
6009-5	Protein C Ag [Units/volume] in Platelet poor plasma by Immunologic method	Both
27820-0	Protein C Ag actual/normal in Platelet poor plasma by Immunologic method	Observation
56764-4	Protein fractions.oligoclonal bands.lgG [Presence] in Cerebral spinal fluid by Isoelectric focusing	Observation
5892-5	Protein S [Units/volume] in Platelet poor plasma by Coagulation assay	Both
27822-6	Protein S actual/normal in Platelet poor plasma by Coagulation assay	Observation
27823-4	Protein S Ag actual/normal in Platelet poor plasma by Immunologic method	Both
27821-8	Protein S Free Ag actual/normal in Platelet poor plasma by Immunologic method	Both
2890-2	Protein/Creatinine [Mass ratio] in Urine	Both
6968-2	Proteinase 3 Ab [Units/volume] in Serum	Both
46267-1	Proteinase 3 Ab [Units/volume] in Serum by Immunoassay	Both
3289-6	Prothrombin activity actual/normal in Platelet poor plasma by Coagulation assay	Both
5902-2	Prothrombin time (PT) in Platelet poor plasma by Coagulation assay	Both
2895-1	Protoporphyrin.zinc [Mass/volume] in Red Blood Cells	Both
29763-0	Protoporphyrin.zinc [Molar ratio] in Red Blood Cells	Both
2900-9	Pyridoxine [Mass/volume] in Serum or Plasma	Both
14121-8	Pyruvate [Moles/volume] in Blood	Both
6222-4	Queen Palm IgE Ab [Units/volume] in Serum	Both
5290-2	Reagin Ab [Presence] in Cerebral spinal fluid by VDRL	Both
20507-0	Reagin Ab [Presence] in Serum by RPR	Both
5292-8	Reagin Ab [Presence] in Serum by VDRL	Both
22463-4	Reagin Ab [Presence] in Serum from donor	Both
31147-2	Reagin Ab [Titer] in Serum by RPR	Both
32147-1	Reducing substances [Mass/volume] in Urine	Both
11060-1	Reducing substances [Presence] in Stool	Both
5809-9	Reducing substances [Presence] in Urine	Both
2915-7	Renin [Enzymatic activity/volume] in Plasma	Both
5876-8	Respiratory syncytial virus Ag [Presence] in Unspecified specimen by Immunoassay	Both
5877-6	Respiratory syncytial virus Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
9398-9	Reticulin Ab [Titer] in Serum	Both
4679-7	Reticulocytes/100 erythrocytes in Blood	Observation
17849-1	Reticulocytes/100 erythrocytes in Blood by Automated count	Observation
2923-1	Retinol [Mass/volume] in Serum or Plasma	Both

38496-6	Retinyl palmitate [Mass/volume] in Serum or Plasma	Both
10331-7	Rh [Type] in Blood	Both
1314-4	Rh immune globulin screen [interpretation]	Observation
17532-3	Rheumatoid arthritis nuclear Ab [Presence] in Serum	Both
33910-1	Rheumatoid factor [Presence] in Serum	Both
5297-7	Rheumatoid factor [Presence] in Serum by Latex agglutination	Both
15205-8	Rheumatoid factor [Units/volume] in Serum by Nephlometry	Both
11572-5	Rheumatoid factor [Units/volume] in Serum or Plasma	Both
6695-1	Riboflavin [Mass/volume] in Blood	Both
8091-1	Ribonucleoprotein extractable nuclear Ab [Presence] in Serum	Both
5301-7	Ribonucleoprotein extractable nuclear Ab [Presence] in Serum by Immunoassay	Both
29374-6	Ribonucleoprotein extractable nuclear Ab [Units/volume] in Serum	Both
51928-0	Ribonucleoprotein extractable nuclear Ab [Units/volume] in Serum by Immunoassay	Both
6230-7	Rice IgE Ab [Units/volume] in Serum	Both
41476-3	Rickettsia rickettsii IgG Ab [Presence] in Serum by Immunoassay	Both
41475-5	Rickettsia rickettsii IgM Ab [Presence] in Serum by Immunoassay	Both
5880-0	Rotavirus Ag [Presence] in Stool by Immunoassay	Both
6233-1	Rough Pigweed IgE Ab [Units/volume] in Serum	Both
22496-4	Rubella virus Ab [Presence] in Serum	Both
5332-2	Rubella virus Ab [Presence] in Serum by Latex agglutination	Both
41763-4	Rubella virus IgG Ab [Titer] in Serum	Both
8014-3	Rubella virus IgG Ab [Units/volume] in Serum	Both
5334-8	Rubella virus IgG Ab [Units/volume] in Serum by Immunoassay	Both
8015-0	Rubella virus IgM Ab [Units/volume] in Serum	Both
5335-5	Rubella virus IgM Ab [Units/volume] in Serum by Immunoassay	Both
13177-1	Russian olive IgE Ab [Units/volume] in Serum	Both
22412-1	Saccharopolyspora rectivirgula Ab [Presence] in Serum	Both
4024-6	Salicylates [Mass/volume] in Serum or Plasma	Both
35597-4	Salicylates [Mass/volume] in Serum or Plasma by Screen method	Both
4023-8	Salicylates [Presence] in Serum or Plasma	Both
6237-2	Salmon IgE Ab [Units/volume] in Serum	Both
43371-4	Salmonella sp/Shigella sp identified in Stool by Organism specific culture	Both
6234-9	Saltwort IgE Ab [Units/volume] in Serum	Both

7691-9	Scallop IgE Ab [Units/volume] in Serum	Both
25757-6	Schistosoma sp IgG Ab [Units/volume] in Serum by Immunoassay	Both
5348-8	SCL-70 extractable nuclear Ab [Presence] in Serum by Immunoassay	Both
27416-7	SCL-70 extractable nuclear Ab [Units/volume] in Serum	Both
5724-0	Selenium [Mass/volume] in Serum or Plasma	Both
2939-7	Serotonin [Mass/volume] in Blood	Both
27057-9	Serotonin [Mass/volume] in Serum	Both
6242-2	Sesame Seed IgE Ab [Units/volume] in Serum	Both
13967-5	Sex hormone binding globulin [Moles/volume] in Serum or Plasma	Both
6244-8	Sheep Sorrel IgE Ab [Units/volume] in Serum	Both
6246-3	Shrimp IgE Ab [Units/volume] in Serum	Both
15283-5	Silver Birch IgE Ab [Units/volume] in Serum	Both
29247-4	Sirolimus [Mass/volume] in Blood	Both
5352-0	Sjogrens syndrome-A extractable nuclear Ab [Presence] in Serum by Immune diffusion (ID)	Both
5351-2	Sjogrens syndrome-A extractable nuclear Ab [Presence] in Serum by Immunoassay	Both
17792-3	Sjogrens syndrome-A extractable nuclear Ab [Units/volume] in Serum	Both
33569-5	Sjogrens syndrome-A extractable nuclear Ab [Units/volume] in Serum by Immunoassay	Both
5354-6	Sjogrens syndrome-B extractable nuclear Ab [Presence] in Serum by Immune diffusion (ID)	Both
5353-8	Sjogrens syndrome-B extractable nuclear Ab [Presence] in Serum by Immunoassay	Both
17791-5	Sjogrens syndrome-B extractable nuclear Ab [Units/volume] in Serum	Both
45142-7	Sjogrens syndrome-B extractable nuclear Ab [Units/volume] in Serum by Immunoassay	Both
5357-9	Smith extractable nuclear Ab [Presence] in Serum by Immune diffusion (ID)	Both
5356-1	Smith extractable nuclear Ab [Presence] in Serum by Immunoassay	Both
11090-8	Smith extractable nuclear Ab [Units/volume] in Serum	Both
43182-5	Smith extractable nuclear Ab [Units/volume] in Serum by Immunoassay	Both
27048-8	Smith extractable nuclear Ab+Ribonucleoprotein extractable nuclear Ab [Units/volume] in Serum	Both
21522-8	Smith extractable nuclear Ab+Ribonucleoprotein extractable nuclear IgG Ab [Units/volume] in Serum	Both
41053-0	SMN1 gene mutations found [Identifier] in Blood or Tissue by Molecular genetics method Nominal	Both
14252-1	Smooth muscle Ab [Presence] in Serum	Both
8095-2	Smooth muscle Ab [Titer] in Serum	Both
5358-7	Smooth muscle Ab [Titer] in Serum by Immunofluorescence	Both
21525-1	Sodium [Moles/volume] in 24 hour Urine	Both
2947-0	Sodium [Moles/volume] in Blood	Both

2951-2	Sodium [Moles/volume] in Serum or Plasma	Both
35678-2	Sodium [Moles/volume] in unspecified time Urine	Both
2955-3	Sodium [Moles/volume] in Urine	Both
2963-7	Somatotropin [Mass/volume] in Serum or Plasma	Both
6248-9	Soybean IgE Ab [Units/volume] in Serum	Both
2965-2	Specific gravity of Urine	Both
5811-5	Specific gravity of Urine by Test strip	Observation
51623-7	Spermatozoa [#/volume] in Semenpost vasectomy	Both
6252-1	Stemphylium botryosum IgE Ab [Units/volume] in Serum	Both
6257-0	Strawberry IgE Ab [Units/volume] in Serum	Both
14207-5	Streptococcal DNAse B [Titer] in Serum	Both
582-7	Streptococcus agalactiae [Presence] in Genital specimen by Organism specific culture	Both
585-0	Streptococcus agalactiae [Presence] in Throat by Organism specific culture	Both
586-8	Streptococcus agalactiae [Presence] in Unspecified specimen by Organism specific culture	Both
584-3	Streptococcus agalactiae [Presence] in Vaginal fluid by Organism specific culture	Both
6551-6	Streptococcus agalactiae Ag [Presence] in Throat by Immunofluorescence	Both
11266-4	Streptococcus agalactiae Ag [Presence] in Unspecified specimen	Both
48683-7	Streptococcus agalactiae DNA [Presence] in Unspecified specimen by Probe and target amplification	Both
5034-4	Streptococcus agalactiae rRNA [Presence] in Unspecified specimen by DNA probe	Both
24027-5	Streptococcus pneumoniae Ag [Presence] in Urine	Both
11268-0	Streptococcus pyogenes [Presence] in Throat by Organism specific culture	Both
18481-2	Streptococcus pyogenes Ag [Presence] in Throat	Both
6556-5	Streptococcus pyogenes Ag [Presence] in Throat by Immunoassay	Both
6559-9	Streptococcus pyogenes Ag [Presence] in Unspecified specimen by Immunofluorescence	Both
5036-9	Streptococcus pyogenes rRNA [Presence] in Unspecified specimen by DNA probe	Both
546-2	Streptococcus.beta-hemolytic [Presence] in Throat by Organism specific culture	Both
547-0	Streptococcus.beta-hemolytic [Presence] in Unspecified specimen by Organism specific culture	Both
22568-0	Streptolysin O Ab [Titer] in Serum	Both
5370-2	Streptolysin O Ab [Units/volume] in Serum or Plasma	Both
34376-4	Strongyloides sp IgG Ab [Units/volume] in Serum by Immunoassay	Both
11529-5	Surgical pathology study	Both
11253-2	Tacrolimus [Mass/volume] in Blood	Both
32721-3	Tacrolimus [Mass/volume] in Serum or Plasma	Both

21751-3	TCRB gene rearrangements [Presence] in Blood or Tissue by Molecular genetics method	Both
2986-8	Testosterone [Mass/volume] in Serum or Plasma	Both
49041-7	Testosterone [Mass/volume] in Serum or Plasma by Detection limit <= 1.0 ng/dL	Both
2991-8	Testosterone Free [Mass/volume] in Serum or Plasma	Both
49042-5	Testosterone Free [Mass/volume] in Serum or Plasma by Detection limit <= 1.0 ng/dL	Both
25987-9	Testosterone Free [Moles/volume] in Serum or Plasma by Radioimmunoassay (RIA)	Both
8169-5	Tetrahydrocannabinol [Presence] in Meconium by Screen method	Both
3426-4	Tetrahydrocannabinol [Presence] in Urine	Both
19415-9	Tetrahydrocannabinol [Presence] in Urine by Screen method	Both
4049-3	Theophylline [Mass/volume] in Serum or Plasma	Both
2998-3	Thiamine [Mass/volume] in Blood	Both
2999-1	Thiamine [Mass/volume] in Serum or Plasma	Both
32554-8	Thiamine [Moles/volume] in Blood	Both
20468-5	Thiamine [Moles/volume] in Serum or Plasma	Both
21563-2	Thiopurine methyltransferase [Enzymatic activity/volume] in Red Blood Cells	Both
14182-0	Thrombin antithrombin complex Ag [Mass/volume] in Platelet poor plasma by Immunologic method	Both
3243-3	Thrombin time in Platelet poor plasma by Coagulation assay	Both
3013-0	Thyroglobulin [Mass/volume] in Serum or Plasma	Both
15210-8	Thyroglobulin Ab [Presence] in Serum	Both
5381-9	Thyroglobulin Ab [Titer] in Serum by Latex agglutination	Both
8098-6	Thyroglobulin Ab [Units/volume] in Serum or Plasma	Both
38505-4	Thyroglobulin recovery in Serum or Plasma	Both
30166-3	Thyroid stimulating immunoglobulins actual/normal in Serum	Both
32786-6	Thyroperoxidase Ab [Titer] in Serum or Plasma	Both
8099-4	Thyroperoxidase Ab [Units/volume] in Serum or Plasma	Both
29574-1	Thyrotropin [Presence] in Dried blood spot	Both
3016-3	Thyrotropin [Units/volume] in Serum or Plasma	Both
11580-8	Thyrotropin [Units/volume] in Serum or Plasma by Detection limit <= 0.005 mIU/L	Both
11579-0	Thyrotropin [Units/volume] in Serum or Plasma by Detection limit <= 0.05 mIU/L	Both
57416-0	Thyrotropin receptor Ab [Units/volume] in Serum by Immunoassay	Both
31144-9	Thyroxine (T4) [Mass/volume] in Dried blood spot	Both
3026-2	Thyroxine (T4) [Mass/volume] in Serum or Plasma	Both
38506-2	Thyroxine (T4) [Presence] in Dried blood spot	Both

3024-7	Thyroxine (T4) free [Mass/volume] in Serum or Plasma	Both
6892-4	Thyroxine (T4) free [Mass/volume] in Serum or Plasma by Dialysis	Both
3021-3	Thyroxine binding globulin [Mass/volume] in Serum or Plasma	Both
6265-3	Timothy IgE Ab [Units/volume] in Serum	Both
35280-7	Tissue transglutaminase IgA Ab [Presence] in Serum by Immunoassay	Both
31017-7	Tissue transglutaminase IgA Ab [Units/volume] in Serum	Both
46128-5	Tissue transglutaminase IgA Ab [Units/volume] in Serum by Immunoassay	Both
32998-7	Tissue transglutaminase IgG Ab [Units/volume] in Serum	Both
56537-4	Tissue transglutaminase IgG Ab [Units/volume] in Serum by Immunoassay	Both
35670-9	Tobramycin [Mass/volume] in Serum or Plasma	Both
4057-6	Tobramycin [Mass/volume] in Serum or Plasmapeak	Both
4059-2	Tobramycin [Mass/volume] in Serum or Plasmatrough	Both
6266-1	Tomato IgE Ab [Units/volume] in Serum	Both
17713-9	Topiramate [Mass/volume] in Serum or Plasma	Both
8039-0	Toxoplasma gondii IgG Ab [Units/volume] in Serum	Both
5388-4	Toxoplasma gondii IgG Ab [Units/volume] in Serum by Immunoassay	Both
8040-8	Toxoplasma gondii IgM Ab [Units/volume] in Serum	Both
5390-0	Toxoplasma gondii IgM Ab [Units/volume] in Serum by Immunoassay	Both
36922-3	TPMT gene mutation analysis in Blood or Tissue by Molecular genetics method Narrative	Both
19710-3	Tramadol [Presence] in Urine by Screen method	Both
3034-6	Transferrin [Mass/volume] in Serum or Plasma	Both
30248-9	Transferrin receptor.soluble [Mass/volume] in Serum or Plasma	Both
22587-0	Treponema pallidum Ab [Presence] in Serum	Both
24312-1	Treponema pallidum Ab [Presence] in Serum by Agglutination	Both
24110-9	Treponema pallidum Ab [Presence] in Serum by Immunoassay	Both
5393-4	Treponema pallidum Ab [Presence] in Serum by Immunofluorescence	Both
41163-7	Treponema pallidum DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both
6561-5	Treponema pallidum IgG Ab [Presence] in Serum	Both
47238-1	Treponema pallidum IgG Ab [Presence] in Serum by Immunoassay	Both
17726-1	Treponema pallidum IgG Ab [Presence] in Serum by Immunofluorescence	Both
10728-4	Trichomonas sp identified in Genital specimen by Organism specific culture	Both
6565-6	Trichomonas vaginalis [Identifier] in Genital specimen by Wet preparation	Both
6568-0	Trichomonas vaginalis rRNA [Presence] in Genital specimen by DNA probe	Both

46154-1	Trichomonas vaginalis rRNA [Presence] in Unspecified specimen by Probe and target amplification	Both		
4073-3	Tricyclic antidepressants [Presence] in Serum or Plasma	Both		
11004-9	Tricyclic antidepressants [Presence] in Urine	Both		
19312-8	Tricyclic antidepressants [Presence] in Urine by Screen method			
3043-7	Triglyceride [Mass/volume] in Blood	Both		
2571-8	Triglyceride [Mass/volume] in Serum or Plasma	Both		
3053-6	Triiodothyronine (T3) [Mass/volume] in Serum or Plasma	Both		
3051-0	Triiodothyronine (T3) Free [Mass/volume] in Serum or Plasma	Both		
3052-8	Triiodothyronine (T3).reverse [Mass/volume] in Serum or Plasma	Both		
3054-4	Triiodothyronine (T3).true [Mass/volume] in Serum or Plasma	Both		
3050-2	Triiodothyronine resin uptake (T3RU) in Serum or Plasma	Both		
42757-5	Troponin I.cardiac [Mass/volume] in Blood	Both		
10839-9	Troponin I.cardiac [Mass/volume] in Serum or Plasma	Both		
49563-0	Troponin I.cardiac [Mass/volume] in Serum or Plasma by Detection limit <= 0.01 ng/mL	Both		
6598-7	Troponin T.cardiac [Mass/volume] in Serum or Plasma	Both		
21582-2	Tryptase [Mass/volume] in Serum or Plasma	Both		
6270-3	Tuna IgE Ab [Units/volume] in Serum	Both		
35571-9	Tyrosine [Moles/volume] in Dried blood spot	Both		
20660-7	Tyrosine [Moles/volume] in Serum or Plasma	Both		
27923-2	Ubiquinone 10 [Mass/volume] in Serum or Plasma	Both		
3084-1	Urate [Mass/volume] in Serum or Plasma	Both		
3086-6	Urate [Mass/volume] in Urine	Both		
3092-4	Urea [Mass/volume] in Urine	Both		
22738-9	Urea [Moles/volume] in Unspecified Specimen	Both		
6299-2	Urea nitrogen [Mass/volume] in Blood	Both		
3093-2	Urea nitrogen [Mass/volume] in Body fluid	Both		
3094-0	Urea nitrogen [Mass/volume] in Serum or Plasma	Both		
11064-3	Urea nitrogen [Mass/volume] in Serum or Plasmapost dialysis	Both		
11065-0	Urea nitrogen [Mass/volume] in Serum or Plasmapre dialysis	Both		
3095-7	Urea nitrogen [Mass/volume] in Urine	Both		
3097-3	Urea nitrogen/Creatinine [Mass ratio] in Serum or Plasma	Both		
32637-1	Urease [Presence] in Tissue	Both		
3107-0	Urobilinogen [Mass/volume] in Urine	Both		

Urobilinogen [Mass/volume] in Urine by Test strip	Both
Urobilinogen [Units/volume] in Urine by Test strip	Both
Valproate [Mass/volume] in Serum or Plasma	Both
Vancomycin [Mass/volume] in Serum or Plasma	Both
Vancomycin [Mass/volume] in Serum or Plasmapeak	Both
Vancomycin [Mass/volume] in Serum or Plasmatrough	Both
Vanillylmandelate [Mass/volume] in Urine	Both
Varicella zoster virus Ab [Presence] in Serum	Both
Varicella zoster virus DNA [#/volume] (viral load) in Unspecified specimen by Probe and target amplification metho	Both
Varicella zoster virus IgG Ab [Presence] in Serum	Both
Varicella zoster virus IgG Ab [Presence] in Serum by Immunoassay	Both
Varicella zoster virus IgG Ab [Units/volume] in Serum	Both
Varicella zoster virus IgG Ab [Units/volume] in Serum by Immunoassay	Both
Varicella zoster virus IgM Ab [Units/volume] in Serum by Immunoassay	Both
Vasoactive intestinal peptide [Mass/volume] in Serum or Plasma	Both
Vasopressin [Mass/volume] in Plasma	Both
Virginia Live Oak IgE Ab [Units/volume] in Serum	Both
Virus identified in Unspecified specimen by Culture	Both
Viscosity of Serum	Both
Vitamin D+Metabolites [Mass/volume] in Serum or Plasma	Both
von Willebrand factor (vWf) Ag [Units/volume] in Platelet poor plasma by Immunologic method	Both
von Willebrand factor (vWf) Ag actual/normal in Platelet poor plasma by Immunologic method	Both
von Willebrand factor (vWf) cleaving protease actual/normal in Platelet poor plasma by Chromogenic method	Both
von Willebrand factor (vWf) multimers [Presence] in Platelet poor plasma	Both
von Willebrand factor (vWf) ristocetin cofactor actual/normal in Platelet poor plasma by Aggregation	Observation
Voriconazole [Mass/volume] in Serum or Plasma	Both
Walnut IgE Ab [Units/volume] in Serum	Both
West Nile virus RNA [Presence] in Serum by Probe and target amplification method	Both
	Both
	Both
	Both
	Both
White Elm IgG Ab [Units/volume] in Serum	Both
	Valproate [Mass/volume] in Serum or Plasma Vancomycin [Mass/volume] in Serum or Plasma Vancomycin [Mass/volume] in Serum or Plasma—peak Vancomycin [Mass/volume] in Serum or Plasma—trough Vanillylimandelate [Mass/volume] in Urine Varicella zoster virus Ab [Presence] in Serum Varicella zoster virus DNA [#/volume] (viral load) in Unspecified specimen by Probe and target amplification methor Varicella zoster virus [gG Ab [Presence] in Serum Varicella zoster virus [gG Ab [Presence] in Serum by Immunoassay Varicella zoster virus [gG Ab [Units/volume] in Serum by Immunoassay Varicella zoster virus [gG Ab [Units/volume] in Serum by Immunoassay Varicella zoster virus [gG Ab [Units/volume] in Serum by Immunoassay Varicella zoster virus [gM Ab [Units/volume] in Serum by Immunoassay Vasoactive intestinal peptide [Mass/volume] in Serum or Plasma Vasopressin [Mass/volume] in Plasma Virginia Live Oak [gE Ab [Units/volume] in Serum Virus identified in Unspecified specimen by Culture Viscosity of Serum Vitamin D+Metabolites [Mass/volume] in Serum or Plasma von Willebrand factor (vWf) Ag (Units/volume) in Platelet poor plasma by Immunologic method von Willebrand factor (vWf) ag actual/normal in Platelet poor plasma by Immunologic method von Willebrand factor (vWf) multimers [Presence] in Platelet poor plasma by Immunologic method von Willebrand factor (vWf) ristocetin cofactor actual/normal in Platelet poor plasma by Aggregation Voriconazole [Mass/volume] in Serum or Plasma Walnut [gE Ab [Units/volume] in Serum by Probe and target amplification method Wheat [gE Ab [Units/volume] in Serum West Nile virus RNA [Presence] in Serum by Probe and target amplification method Wheat [gE Ab [Units/volume] in Serum White Birch [gE Ab [Units/volume] in Serum White Birch [gE Ab [Units/volume] in Serum

7407-0	White Hickory IgE Ab [Units/volume] in Serum	Both		
6281-0	White mulberry IgE Ab [Units/volume] in Serum	Both		
6189-5	White Oak IgE Ab [Units/volume] in Serum			
7291-8	Whole Egg IgE Ab [Units/volume] in Serum			
6286-9	Wormwood IgE Ab [Units/volume] in Serum	Both		
45042-9	XXX microorganism Ag [Identifier] in Unspecified specimen by Immunofluorescence	Both		
35691-5	XXX microorganism DNA [Presence] in Unspecified specimen by Probe and target amplification method	Both		
18482-0	Yeast [Presence] in Unspecified specimen by Organism specific culture	Both		
701-3	Yersinia sp identified in Unspecified specimen by Organism specific culture	Both		
5763-8	Zinc [Mass/volume] in Serum or Plasma	Both		
25557-0	Zinc [Moles/volume] in Red Blood Cells	Both		
29620-2	Zonisamide [Mass/volume] in Serum or Plasma	Both		
2218-6	Dopamine [Mass/time] in 24 hour Urine	Both		
2701-1	Oxalate [Mass/time] in 24 hour Urine	Both		
2779-7	Phosphate [Mass/time] in 24 hour Urine	Both		
2889-4	Protein [Mass/time] in 24 hour Urine	Both		
2956-1	Sodium [Moles/time] in 24 hour Urine	Both		
30003-8	Microalbumin [Mass/volume] in 24 hour Urine	Both		
3087-4	Urate [Mass/time] in 24 hour Urine	Both		
3096-5	Urea nitrogen [Mass/time] in 24 hour Urine	Both		
58448-2	Microalbumin ug/min [Mass/time] in 24 hour Urine	Both		
2472-9	IgM [Mass/volume] in Serum or Plasma	Both		
2605-4	Meat fibers [Presence] in Stool by Light microscopy	Both		
44023-0	Bacteria [Presence] in Vaginal fluid by Wet preparation	Both		
	*Request Regenstrief to change from Observation to Both			

LOINC Number	LOINC Number aLOINC Common Order Codes Value Set: Panels			
13361-1	Semen Analysis Pnl	Order		
24315-4	Cytomegalovirus Ab.IgG & IgM panel	Order		
24316-2	Epstein Barr virus capsid Ab.IgG & IgM panel	Order		
24319-6	Cardiolipin IgG & IgM panel in Serum	Order		
24321-2	Basic metabolic 2000 panel in Serum or Plasma	Order		
24323-8	Comprehensive metabolic 2000 panel in Serum or Plasma	Order		
24325-3	Hepatic function 2000 panel in Serum or Plasma	Order		
24326-1	Electrolytes 1998 panel in Serum or Plasma	Order		
24331-1	Lipid 1996 panel in Serum or Plasma	Order		
24351-9	Protein electrophoresis panel in Serum or Plasma	Order		
24353-5	Glucose tolerance 2H gestational panel	Order		
24356-8	Urinalysis complete panel in Urine	Order		
24357-6	Urinalysis macro (dipstick) panel in Urine	Order		
24360-0	Hemoglobin & Hematocrit panel in Blood	Order		
24362-6	Renal function 2000 panel in Serum or Plasma	Order		
24363-4	Acute hepatitis 2000 panel in Serum Qualitative	Order		
24364-2	Obstetric 1996 panel in Serum & Blood	Order		
24535-5	Microalbumin/Creatinine ratio panel	Order		
29588-1	Heavy metals panel	Order		
34528-0	PT panel in Platelet poor plasma by Coagulation assay	Order		
34530-6	ABO & Rh group panel in Blood	Order		
34532-2	Blood type & Indirect antibody screen panel in Blood	Order		
34535-5	Microalbumin/Creatinine [Mass ratio] in Urine	Order		
34543-9	Bilirubin direct & total panel	Order		
34544-7	Complement C3 & C4 panel	Order		
34549-6	Follitropin & Lutropin panel	Order		
34550-4	Immunoglobulin panel	Order		
34555-3	Creatinine 24H renal clearance panel	Order		
34556-1	Cell count panel in Body fluid	Order		
34557-9	Cell count & Differential panel in Body fluid	Order		
34563-7	Cell count panel in Cerebral spinal fluid	Order		
34564-5	Cell count & Differential panel in Cerebral spinal fluid	Order		
35083-5	Amino acids panel	Order		
35558-6	Cholinesterase panel	Order		

41484-7	Coxsackievirus A Ab panel	Order			
41485-4	Coxsackievirus B Ab panel	Order			
41840-0	Coxiella burnetii phase 1 & 2 Ab.IgG panel				
41878-0	Hepatitis A & B & C 7a panel				
42929-0	Lactate dehydrogenase panel	Order			
43110-6	Immunoglobulin light chains [Mass/volume] in 24 hour Urine	Order			
43130-4	Bile acid fractionated panel	Order			
44907-4	5-Hydroxyindoleacetate [Mass/time] in 24 hour Urine	Order			
45057-7	Cardiolipin IgA and IgG and IgM panel - Serum	Order			
45059-3	Ehrlichia chaffeensis Ab.IgG & IgM panel	Order			
45066-8	Creatinine and Glomerular filtration rate.predicted panel	Order			
45268-0	Immunodeficiency Pnl Bld FC	Order			
45269-8	Chronic Leukemia Pnl XXX FC	Order			
45270-6	Acute leukemia Pnl XXX FC	Order			
47290-2	IgG subclass panel	Order			
48615-9					
48798-3	First trimester maternal screen panel in Serum or Plasma	Order			
48800-7	Second trimester quad maternal screen panel in Serum or Plasma	Order			
48802-3	Alpha-1-fetoprotein panel				
48824-7	Resp allergen N Atl a Pnl Ser	Order			
48825-4	Resp allergen Mid Atl Pnl Ser	Order			
48826-2	Resp allergen S Atl a Pnl Ser	Order			
48827-0	Resp allergen Subtropical FL Pnl Ser	Order			
48828-8	Resp allergen Greater OH val a Pnl Ser	Order			
48829-6	Resp allergen S Central Pnl Ser	Order			
48830-4	Resp allergen N midwest a Pnl Ser	Order			
48831-2	Resp allergen Central midwest a Pnl Ser	Order			
48832-0	Resp allergen Great plains a Pnl Ser	Order			
48833-8	Resp allergen SW grassland Pnl Ser	Order			
48834-6	Resp allergen Rockies a Pnl Ser	Order			
48835-3	Resp allergen Arid SW Pnl Ser	Order			
48836-1	Resp allergen S coast CA Pnl Ser	Order			
48837-9	Resp allergen CA central valley Pnl Ser	Order			
48838-7	Resp allergen Intermountain W a Pnl Ser	Order			
48839-5	Resp allergen Inland NW a Pnl Ser	Order			

48840-3	Resp allergen Casc Pacif NW a Pnl Ser	Order		
48841-1	Resp allergen AK a Pnl Ser	Order		
48916-1	Resp allergen N Atl b Pnl Ser	Order		
48917-9	Resp allergen S Atl b Pnl Ser			
48918-7	Resp allergen NC,PA,SC,VA,WV Pnl Ser	Order		
48919-5	Resp allergen mid FL Pnl Ser	Order		
48920-3	Resp allergen S FL Pnl Ser	Order		
48921-1	Resp allergen SE coast Pnl Ser	Order		
48922-9	Resp allergen WS central Pnl Ser	Order		
48923-7	Resp allergen Greater OH val b Pnl Ser	Order		
48924-5	Resp allergen N midwest b Pnl Ser	Order		
48925-2	Resp allergen Central midwest b Pnl Ser	Order		
48926-0	Resp allergen Great plains b Pnl Ser	Order		
48927-8	Resp allergen Rockies b Pnl Ser	Order		
48928-6	Resp allergen Inland NW b Pnl Ser	Order		
48929-4	Resp allergen Casc Pacif NW b Pnl Ser	Order		
48930-2	Resp allergen Intermountain W b Pnl Ser	Order		
48931-0	Resp allergen AZ,CA,NM Pnl Ser	Order		
48932-8	Resp allergen AK b Pnl Ser	Order		
48933-6	Resp allergen HI Pnl Ser	Order		
49017-7	Resp allergen N Atl c Pnl Ser	Order		
49018-5	Resp allergen Intermountain W c Pnl Ser	Order		
49019-3	Resp allergen PR Pnl Ser	Order		
49020-1	Resp allergen Coastal CA Pnl Ser	Order		
49021-9	Resp allergen Greater OH val c Pnl Ser	Order		
49022-7	Resp allergen N midwest c Pnl Ser	Order		
49120-9	Immunodeficiency follow-up Pnl XXX FC	Order		
49222-3	Food allergen Pnl Ser	Order		
50190-8	Iron & Iron binding capacity panel in Serum or Plasma	Order		
50608-9	Glucose tolerance 3H gestational panel	Order		
50677-4	Semen analysis p vas Pnl	Order		
51662-5	Core resp allergen Pnl Ser	Order		
53575-7	VAP panel	Order		
53794-7	Prostate specific Ag panel - Serum or Plasma	Order		
54078-1	Cystic fibrosis newborn screening panel	Order		

54089-8	Newborn screening panel American Health Information Community (AHIC)	Order		
54145-8	Bacterial vaginosis & vaginitis DNA panel	Order		
54226-6	Lymphoma Pnl XXX FC			
54227-4	Lymphoma - acute screen Pnl XXX FC			
54228-2	Lymphoma - CLL screen Pnl XXX FC	Order		
54229-0	Lymphoma - T-cell screen Pnl XXX FC	Order		
54231-6	Semen analysis fertility Pnl	Order		
54454-4	Arsenic fractionated panel - Urine	Both		
55151-5	Aldosterone and Renin panel - Plasma	Order		
55152-3	Amiodarone & Desethylamiodarone panel	Order		
55160-6	Adenovirus Ab.IgG & IgM panel	Order		
55164-8	Paroxysmal nocturnal panel	Order		
55231-5	Electrolytes panel in Blood	Order		
55724-9	Apolipoprotein LPA [Mass/volume] in Serum or Plasma	Both		
55727-2	Tissue transglutaminase Ab.lgA & IgG panel [Presence] in Serum	Both		
56146-4	Fungal Ab panel	Order		
57020-0	Urinalysis dipstick W Reflex Microscopic panel in Urine			
57021-8	CBC W Auto Differential panel in Blood			
57022-6	CBC W Reflex Manual Differential panel in Blood			
57698-3	Lipid panel with direct LDL in Serum or Plasma	Order		
57770-0	Toxoplasma gondii Ab.IgG & IgM panel	Order		
57778-3	Immunoglobulin light chains.free panel	Order		
57782-5	CBC with Ordered Manual Differential panel in Blood	Order		
58077-9	Urinalysis complete W Reflex Culture panel in Urine	Order		
58410-2	Complete blood count (hemogram) panel in Blood by Automated count	Order		
58431-8	Microalbumin panel in 24 hour Urine	Order		
58446-6	Creatinine renal clearance adjusted for body surface area panel	Order		
58447-4	Microalbumin/Creatinine panel in 24H Urine	Order		
58733-7	Mycoplasma pneumoniae Ab.IgG & IgM panel	Order		
62341-3	Borrelia burgdorferi Ab.lgG+lgM with reflex to immune blot panel in Serum	Order		
63486-5	Nut allergen pnl Ser	Order		
64017-7	Chlamydia trachomatis & Neisseria gonorrhoeae rRNA panel	Order		
65632-2	Clozapine & Norclozapine panel in Serum or Plasma	Order		
65634-8	Creatinine 24 hour urine panel	Order		
65750-2	Drugs of abuse 5 panel in Urine by Screen	Order		

65758-5	CD4 T-cell absolute panel in Blood by Flow cytometry	Order
65759-3	T-Cell Subsets CD4 & CD8	Order
69742-5	CBC W Differential panel, method unspecified	Order
71432-9	Human papilloma virus 16 & 18 & 31+33+35+39+45+51+52+56+58+59+66+68 DNA panel	Order
72257-9	Platelet function.collagen + Adenosine diphosphate induced and Epinephrine induced panel -	Order
72488-0	Beta 2 glycoprotein 1 IgG and IgM panel - Serum	Order
73879-9	Catecholamine metabolites and creatinine panel - Urine	Order
65634-8	Creatinine 24 hour urine panel	Order
47289-4	IgG & IgG subclass panel	Order
47290-2	IgG subclass panel	Order
50190-8	Iron and Iron binding capacity panel	Order
43099-1	Vanillylmandelate [Mass/time] in 24 hour Urine	Order
49590-3	Calcidiol & Calciferol panel in Serum or Plasma	Order
53766-2	Estrogen fraction panel	Order

Appendix D – Bu	ilding a Common LO	INC Lab Order Se	et - Key Statistical
Summary Ro	eport of INPC Data ai	nd LOINC Top 300	O Orders List

Grant ID: 17997

Building a Common LOINC Lab Order Set

Interim Deliverable

Key Statistical Summary Report of INPC Data and LOINC Top 300 Orders List

January 31, 2013

Regenstrief Institute, Inc. Indianapolis, Indiana

Background

The overall objective of this project is to provide critical data and analytics that enables creation of a timely, empirically derived, and consensus-vetted revision of the LOINC Top Orders list. To accomplish this aim, we will mine data from the Indiana Network for Patient Care (INPC), the nation's longest tenured and most comprehensive health information exchange. These data will provide the substrate for developing a list of the most commonly ordered laboratory tests. The INPC data will be added to 3-8 other sources (not funded by this proposal) and then fed into a consensus-based review by laboratory and clinical data standards experts to be coordinated by the Standards and Interoperability (S&I) Framework of the Office of the National Coordinator for Health Information Technology (ONC). By defining such a list in a standard nomenclature, LOINC, electronic health record (EHR) systems can vastly reduce the complexity and cost of electronically ordering tests from clinical laboratories.

Methodology

We extracted laboratory data from the INPC repository for 10 different institutions. These institutions represent separate and autonomous healthcare systems. Together, they provide the vast majority of healthcare in central Indiana. Each institution has their own idiosyncratic set of codes and names for the laboratory tests that they provide. They deliver their laboratory data to the INPC over HL7 version 2 messages. In order to stitch these data sources together into a shared repository, these local codes have been mapped to a common vocabulary, the Regenstrief Dictionary, that is based on reference standards such as LOINC.¹ Most, but not all, laboratory test result codes in the Regenstrief Dictionary are mapped to LOINC codes. Many laboratory tests are ordered as single items, and so the order codes and results codes are the same. In the HL7 message, the location of the code indicates whether it is being used as an order (i.e. it is in the OBR segment) or a result (i.e. it is in the OBX segment). Other laboratory tests are ordered as panels (a.k.a. batteries or profiles). Many, but not all of these codes are mapped to LOINC codes as well.

All kinds of clinical results (labs, vital signs, survey instruments) in the INPC repository are stored in a single uniform table per institution. To identify laboratory tests from this collection, we first created a list of the laboratory codes in the Regenstrief Dictionary. We then extracted laboratory data for the period January 1, 2011 through January 1, 2013. We reviewed the list of order codes and attempted to identify those that represented panels and those that represented

¹ Vreeman DJ, Stark M, Tomashefski GL, Phillips DR, Dexter PR. Embracing change in a health information exchange. AMIA Annu Symp Proc. 2008 Nov 6:768-72. PubMed PMID: 18999242; PubMed Central PMCID: PMC2656094.

single tests. In so doing, we found that a small number of local panel codes (less than 1% of the total volume) from various institutions (sent as codes in OBR-4) had been mapped to Regenstrief Dictionary codes that represented classes of tests rather than true panels. For example, a term "Cholesterol Tests and Lipid Panels" is meant to be used for grouping a domain of tests rather than representing a specific panel. We excluded such terms from our final set.

We then calculated summary statistics across all institutions for all lab tests ordered, tests ordered as panels, and those ordered as single test. We also indicated which of LOINC codes mapped to the Regenstrief Dictionary terms were present in the previously established LOINC Top 300. Because there are often several different Regenstrief Dictionary codes mapped to the same LOINC code (i.e. they are more specific or idiosyncratic and have distinctions that LOINC does not make), we also calculated a summary aggregating all of the volume for any code mapped to a particular LOINC, and then interspersing the remaining Regenstrief codes that had not been mapped to LOINC codes according to their relative volume.

For all panels contained in the set of orders accounting for 99% of the overall volume, we calculated the overall volume for each child element (e.g. a single result variable) that ever appeared in that panel across each institution. We also found the list of all child elements for a particular panel by institution. We also determined where panels had been mapped to LOINC codes and the LOINC codes for each child element.

In our original proposal we indicated that we would analyze the differences between the entire data set and the subset from the ambulatory setting. We also noted that it is an especially odious problem because the data arrive from thousands of source systems identified only by cryptic abbreviations. In the time since that proposal, the S&I steering group for this project reviewed some early data and decided that it was probably not worth the effort of doing a detailed analysis between these settings because there is so much overlap. Rather, we would take data sources from all of these settings, and instead use a general rubric to exclude a few categories of tests that are predominately done in inpatient settings, including:

- Tests related to blood product usage
- Tests that monitored the levels of intravenous antibiotics
- Tests done at birth
- Blood gases
- Electrolyte 24 hour urines (possibly)

Thus, in our analysis we did calculate relative order volume for one institution across care settings of inpatient, outpatient, emergency department, or "unknown". We also marked the tests in the list that fell into one the categories listed above.

Results

A spreadsheet containing the detailed results of this analysis are included as a separate attachment. Here we provide a brief summary.

In total, the data we extracted represents 173,929,006 laboratory orders. The local tests from these 10 institutions were mapped to 3,538 Regenstrief Dictionary codes, of which 2710 were mapped to LOINC codes. 396 of the 3,538 Regenstrief Dictionary codes were mapped to LOINC codes contained in the LOINC Top 300 list. Of the 313 LOINC codes in the LOINC Top 300 Orders list, 242 of them were mapped to Regenstrief Dictionary terms in our data set.

The detailed results of overall order volume by Regenstrief Dictionary code are contained on the worksheet "parent_orders_uniqueRIcodes".

When we condensed the list of order codes by aggregating the volume of any code mapped to the same LOINC code, we were left with 3,127 order codes (some from LOINC, some from the Regenstrief Dictionary). These results are contained on the worksheet "parent_orders_aggLOINCs".

The table below shows the number of unique laboratory codes accounting for specific levels of the overall volume. As a corollary, while 635 Regenstrief codes accounted for 99.5% of the volume, the remaining 2,903 codes accounted for remaining 0.5%.

Thus, there is a very long tail with little volume.

	Unique Regenstrief Dictionary Codes	LOINC codes with aggregated volume and remaining unmapped Regenstrief Dictionary Codes
Accounting for 90% of volume	50	37
Accounting for 95% of volume	117	93
Accounting for 99% of volume	435	356
Accounting for 99.5% of volume	635	527

Table 1. Number of codes accounting for the top 90-99.5% of overall order volume.

Our analysis showing the relative volume of each child element by panel per institution is given in the worksheet "top99_w_children_counts_by_inst". Overall, these results highlight the

marked variation in the child elements reported across institutions. If the workgroup decides to further evaluate the sets of child elements in each panel, the worksheet "top99_w_children_lists_by_inst" provides the list of child codes for each panel by institution.

Lastly, we created a breakdown of the codes used by one institution by care setting. These results are provided in worksheet "inst1_parents_by_care_setting". While many results did not have a care setting indicated, our data provides further support to the decision of the S&I framework workgroup to focus on a few key test categories. The dividing line between tests ordered in inpatient versus outpatient settings is quite blurry.

Discussion

We will be sharing these results and analysis with the S&I Framework LOINC Order Code committee. Dr. Vreeman will continue to participate in the work of the Committee, provide consultation, domain expertise, and facilitation of how this work can be brought back into the LOINC distribution.

Appendix - Attached File

2014 01 31 - INPC Summary Analysis.xlsx

Appendix E – Business Rules for Comparing a User-defined Panel to a LOINC
Panel

Business Rules for Comparing a User Panel to a LOINC Panel

- 1. LOINC panels should include tests with methodless LOINC codes when a method is not considered to be important for the interpretation of the results. A user panel could replace any LOINC code with a test that is the same except for the method.
 - a. If a panel is defined using analytes with a specific method (i.e. EIA vs. IB), the LOINC code reported for that analyte must use the same method-specific LOINC code to be considered comparable. It is not acceptable to substitute a methodless LOINC code.
- 2. It is NOT acceptable to substitute quantitative LOINC terms for qualitative terms (or vice versa)
- 3. A user-defined panel that contains additional "measured" tests that are not expected components of a LOINC Panel is not considered to be comparable. Another code should be considered, regardless of whether the other panel components are the same.
- 4. Tests that are not "measured" tests may be included in a LOINC panel (i.e. calculations, derived values, AOE questions, interpretations, etc.) and are designated as "Optional" components. A user panel may or may not contain one or more of the listed Optional components and still be considered as comparable.
- 5. Some panels are defined using a textual description of what they are used for instead of having identified primary components, especially where there may be a more generic way testing and it is difficult to identify specific tests (i.e. cytogenetic testing, lupus anticoagulant panels, etc.). When this situation is appropriate, a user will need to interpret the intent of the panel in order to determine comparability.
- 6. Reflex panels should have different LOINC codes for tests/panels that reflex and those that do not reflex.

Comparison Panel #1 – This user-defined panel is considered comparable since the component tests are the same and it is acceptable to use method-specific LOINC codes for panels defined with methodless LOINC codes (Rule 1)

LOINC	Universal	Component	Universal Panel Component Name	R/O/C	Component	Panel Components for Comparison
Code	Panel Name	LOINC Code			LOINC Code	
24315-4	Cytomegalovir us IgG and IgM panel - Serum	7853-5	Cytomegalovirus IgM Ab [Units/volume] in Serum	R	5126-8	Cytomegalovirus IgM Ab [Units/volume] in Serum by Immunoassay
		7852-7	Cytomegalovirus IgG Ab [Units/volume] in Serum	R	5124-3	Cytomegalovirus IgG Ab [Units/volume] in Serum by Immunoassay

Comparison Panel #2 – This user-defined panel is not considered to be comparable since it includes 2 additional measured components that are not in the Universal Panel (Rule 3). NOTE: The inclusion of an Optional component in the Universal Panel does not have a bearing on the comparability of the user-defined panel (Rule 4).

LOINC	Universal	Component	Universal Panel Component Name	R/O/C	Component	Panel Components for Comparison
Code	Panel Name	LOINC Code			LOINC Code	
24335-2	Creatine	2157-6	Creatine kinase [Enzymatic activity/volume] in	R	2157-6	Creatine kinase [Enzymatic activity/
	kinase panel -		Serum or Plasma			volume] in Serum or Plasma
	Serum or					
	Plasma					
		20569-0	Creatine kinase.MB/Creatine kinase.total in	R	20569-0	Creatine kinase.MB/Creatine kinase.total
			Serum or Plasma			in Serum or Plasma
		9642-0	Creatine kinase.BB/Creatine kinase.total in	R	9642-0	Creatine kinase.BB/Creatine kinase.total
			Serum or Plasma			in Serum or Plasma
		9643-8	Creatine kinase.MM/Creatine kinase.total in	R	9643-8	Creatine kinase.MM/Creatine
			Serum or Plasma			kinase.total in Serum or Plasma
		5912-1	Creatine kinase isoenzymes [interpretation] in	0	26020-8	Creatine kinase.macromolecular.type
			Serum or Plasma			2/Creatine kinase.total
					26019-0	Creatine kinase.macromolecular.type
						1/Creatine kinase.total

Comparison Panel #3 – This panel is considered <u>not</u> comparable since the component tests are originally defined with method-specific LOINC terms and the panel for comparison uses methodless LOINC terms (Rule 1a). NOTE: The inclusion of an Optional component in the Universal Panel does not have a bearing on the comparability of the user-defined panel (Rule 4).

LOINC	Universal	Component	Universal Panel Component Name	R/O/C	Component	Panel Components for Comparison
Code	Panel Name	LOINC Code			LOINC Code	
41878-0	Dengue virus IgG and IgM panel [Units/ volume] - Serum by Immunoassay	23991-3	Dengue virus IgG Ab [Units/volume] in Serum by Immunoassay	R	23958-2	Dengue virus IgG Ab [Units/volume] in Serum
		23992-1	Dengue virus IgM Ab [Units/volume] in Serum by Immunoassay	R	23968-1	Dengue virus IgM Ab [Units/volume] in Serum
		51785-4	Dengue virus IgG and IgM [interpretation] in Serum	0		

Comparison Panel #4 – This user-defined panel is considered to be comparable since the components use the same method-specific LOINC terms (Rule 1) and the additional test is a non-measured component (i.e. it is used to indicate if the overall panel is positive or negative) (Rule 4).

LOINC	Universal	Component	Universal Panel Component Name	R/O/C	Component	Panel Components for Comparison
Code	Panel Name	LOINC Code			LOINC Code	
72480-7	Barbiturates	72399-9	Amobarbital [Mass/volume] in Blood by		72399-9	Amobarbital [Mass/volume] in Blood by
	panel - Blood		Confirmatory method			Confirmatory method
	by					
	Confirmatory					
	method					
		72398-1	Butalbital [Mass/volume] in Blood by		72398-1	Butalbital [Mass/volume] in Blood by
			Confirmatory method			Confirmatory method
		72396-5	Phenobarbital [Mass/volume] in Blood by		72396-5	Phenobarbital [Mass/volume] in Blood
			Confirmatory method			by Confirmatory method
		9643-8	Creatine kinase.MM/Creatine kinase.total in	R	9643-8	Creatine kinase.MM/Creatine
			Serum or Plasma			kinase.total in Serum or Plasma
		5912-1	Creatine kinase isoenzymes [interpretation] in	0	26020-8	Creatine kinase.macromolecular.type
			Serum or Plasma			2/Creatine kinase.total
					26019-0	Creatine kinase.macromolecular.type
						1/Creatine kinase.total



	Canadian Test Order List	
referencedConceptID	conceptName (LOINC long common name)	enPreferredTerm (display name)
10501-5	Lutropin [Units/volume] in Serum or Plasma	LH
10525-4	Microscopic observation [Identifier] in Unspecified specimen by Cyto stain	Microscopic; Cytology Stain
10701-1	Ova and parasites identified in Stool by Concentration	Ova & Parasites; Stool; Concentration
10839-9	Troponin I.cardiac [Mass/volume] in Serum or Plasma	Troponin I Cardiac
11529-5	Surgical pathology study	Study Report; Surgical Pathology
12195-4	Creatinine renal clearance/1.73 sq M in 24 hour	Creatinine Clearance/1.73 Sq M; 24h
12286-1	Drugs identified in Urine by Screen method	Drugs Identified; Urine; Screen
12799-3	Parathyrin Ab [Units/volume] in Serum	Parathyroid Hormone (PTH) Ab
13317-3	Methicillin resistant Staphylococcus aureus [Presence] in Unspecified specimen by Organism specific culture	MRSA; Culture
14196-0	Reticulocytes [#/volume] in Blood	Reticulocytes
14631-6	Bilirubin.total [Moles/volume] in Serum or Plasma	Bilirubin, Total
14635-7	Calcidiol [Moles/volume] in Serum or Plasma	25-Hydroxyvitamin D3
14646-4	Cholesterol in HDL [Moles/volume] in Serum or Plasma	Cholesterol In HDL
14647-2	Cholesterol [Moles/volume] in Serum or Plasma	Cholesterol
14675-3	Cortisol [Moles/volume] in Serum or Plasma	Cortisol
14682-9	Creatinine [Moles/volume] in Serum or Plasma	Creatinine
14683-7	Creatinine [Moles/volume] in Urine	Creatinine; Urine
14685-2	Cobalamin (Vitamin B12) [Moles/volume] in Serum or Plasma	Vitamin B12
14688-6	Dehydroepiandrosterone sulfate (DHEA-S) [Moles/volume] in Serum or Plasma	Dehydroepiandrosterone Sulfate (DHEA-S)
14715-7	Estradiol (E2) [Moles/volume] in Serum or Plasma	Estradiol
14749-6	Glucose [Moles/volume] in Serum or Plasma	Glucose
14771-0	Fasting glucose [Moles/volume] in Serum or Plasma	Glucose Fasting
14798-3	Iron [Moles/volume] in Serum or Plasma	Iron
14800-7	Iron binding capacity [Moles/volume] in Serum or Plasma	Iron Binding Capacity
14801-5	Iron saturation [Molar fraction] in Serum or Plasma	Iron Saturation
14866-8	Parathyrin.intact [Moles/volume] in Serum or Plasma	Parathyroid Hormone (PTH) Intact
14879-1	Phosphate [Moles/volume] in Serum or Plasma	Phosphate
14890-8	Progesterone [Moles/volume] in Serum or Plasma	Progesterone
14913-8	Testosterone [Moles/volume] in Serum or Plasma	Testosterone
14914-6	Testosterone Free [Moles/volume] in Serum or Plasma	Testosterone Free
14920-3	Thyroxine (T4) free [Moles/volume] in Serum or Plasma	T4 Free
14927-8	Triglyceride [Moles/volume] in Serum or Plasma	Triglyceride
14928-6	Triiodothyronine (T3) Free [Moles/volume] in Serum or Plasma	T3 Free
14933-6	Urate [Moles/volume] in Serum or Plasma	Urate
14957-5	Microalbumin [Mass/volume] in Urine	Microalbumin; Urine
14979-9	Activated partial thromboplastin time (aPTT) in Platelet poor plasma by Coagulation assay	APTT
16128-1	Hepatitis C virus Ab [Presence] in Serum	Hepatitis C Virus Ab
1742-6	Alanine aminotransferase [Enzymatic activity/volume] in Serum or Plasma	Alanine Aminotransferase (ALT)
1751-7	Albumin [Mass/volume] in Serum or Plasma	Albumin
1754-1	Albumin [Mass/volume] in Urine	Albumin; Urine
1798-8	Amylase [Enzymatic activity/volume] in Serum or Plasma	Amylase
1920-8	Aspartate aminotransferase [Enzymatic activity/volume] in Serum or Plasma	Aspartate Aminotransferase (AST)
19765-7	Microscopic observation [Identifier] in Cervical or vaginal smear or scraping by Cyto stain	Microscopic; Cytology Stain
2000-8	Calcium [Moles/volume] in Serum or Plasma	Calcium
2028-9	Carbon dioxide, total [Moles/volume] in Serum or Plasma	Carbon Dioxide
20570-8	Hematocrit [Volume Fraction] of Blood	Hematocrit

20575-7	Hanatitic A virus Ah [Proconcel in Corum	Honotitic A Virus Ab
20575-7	Hepatitis A virus Ab [Presence] in Serum Chlorida [Males (values)] in Serum or Plasma	Hepatitis A Virus Ab Chloride
	Chloride [Moles/volume] in Serum or Plasma	
20785-2	Drugs identified in Serum or Plasma by Screen method	Drugs Identified; Serum/Plasma; Screen
2106-3	Choriogonadotropin (pregnancy test) [Presence] in Urine	HCG; Urine
2157-6	Creatine kinase [Enzymatic activity/volume] in Serum or Plasma	Creatine Kinase
2164-2	Creatinine renal clearance in 24 hour	Creatinine Clearance; 24h
22310-7	Helicobacter pylori Ab [Presence] in Serum	Helicobacter pylori Ab
22322-2	Hepatitis B virus surface Ab [Presence] in Serum	Hepatitis B Virus Surface Ab
22664-7	Urea [Moles/volume] in Serum or Plasma	Urea
2276-4	Ferritin [Mass/volume] in Serum or Plasma	Ferritin
2324-2	Gamma glutamyl transferase [Enzymatic activity/volume] in Serum or Plasma	Gamma Glutamyl Transferase (GGT)
2335-8	Hemoglobin.gastrointestinal [Presence] in Stool	Occult Blood; Stool
24326-1	Electrolytes 1998 panel in Serum or Plasma	Electrolytes
24331-1	Lipid 1996 panel in Serum or Plasma	Lipid Panel
24351-9	Protein electrophoresis panel in Serum or Plasma	Protein Electrophoresis Panel
24356-8	Urinalysis complete panel in Urine	Urinalysis Panel
24357-6	Urinalysis macro (dipstick) panel in Urine	Urinalysis Dipstick Panel
24365-9	Urinalysis microscopic panel in Urine sediment	Urinalysis Microscopic Panel
2532-0	Lactate dehydrogenase [Enzymatic activity/volume] in Serum or Plasma	Lactate Dehydrogenase (LD)
25415-1	Folate [Moles/volume] in Blood	Folate; Bld
25514-1	Rubella virus IgG Ab [Presence] in Serum	Rubella Virus Ab IgG
2601-3	Magnesium [Moles/volume] in Serum or Plasma	Magnesium
26449-9	Eosinophils [#/volume] in Blood	Eosinophils
26453-1	Erythrocytes [#/volume] in Blood	Erythrocytes
26464-8	Leukocytes [#/volume] in Blood	Leukocytes
26515-7	Platelets [#/volume] in Blood	Platelets
2823-3	Potassium [Moles/volume] in Serum or Plasma	Potassium
2842-3	Prolactin [Mass/volume] in Serum or Plasma	Prolactin
2885-2	Protein [Mass/volume] in Serum or Plasma	Protein
2951-2	Sodium [Moles/volume] in Serum or Plasma	Sodium
29576-6	Bacterial susceptibility panel in Isolate	Bacterial Susceptibility Panel
30341-2	Erythrocyte sedimentation rate	Erythrocyte Sedimentation Rate (ESR)
3040-3	Lipase [Enzymatic activity/volume] in Serum or Plasma	Triacylglycerol Lipase
30522-7	C reactive protein [Mass/volume] in Serum or Plasma by High sensitivity method	C Reactive Protein; High Sensitivity
31348-6	DNA double strand Ab [Presence] in Serum	DNA Double Strand Ab; Screen
31418-7	Heterophile Ab [Presence] in Serum	Heterophile Ab
32294-1	Albumin/Creatinine [Ratio] in Urine	Albumin/Creatinine; Urine
32309-7	Cholesterol.total/Cholesterol in HDL [Molar ratio] in Serum or Plasma	Cholesterol/Cholesterol In HDL
33037-3	Anion gap in Serum or Plasma	Anion Gap
33721-2	Bone marrow Pathology biopsy report	Pathology Biopsy Report; Bone Marrow
33910-1	Rheumatoid factor [Presence] in Serum	Rheumatoid Factor; Screen
34532-2	Blood type and Indirect antibody screen panel in Blood	Blood Type & Ab Screen
35592-5	Creatinine renal clearance/1.73 sq M.predicted by Cockcroft-Gault formula, BSA formula	Creatinine Clearance/1.73 Sq M Predicted
39469-2	Cholesterol in LDL [Moles/volume] in Serum or Plasma by calculation	Cholesterol In LDL
43304-5	Chlamydia trachomatis rRNA [Presence] in Unspecified specimen by Probe and target amplification method	Chlamydia trachomatis rRNA; PCR/NAAT
45076-7	Chlamydia trachomatis+Neisseria gonorrhoeae rRNA [Presence] in Unspecified specimen by DNA probe	Chlamydia trachomatis+Neisseria gonorrhoeae rRNA; Probe
50190-8	Iron and Iron binding capacity panel in Serum or Plasma	Iron & Iron Binding Capacity Panel
50196-5	Occult blood panel in Stool	Occult Blood Panel; Stool
50582-6	Glucose tolerance gestational panel in Urine and Serum or Plasma	Glucose Tolerance Gestational Panel

51723-5	Fungus [Presence] in Unspecified specimen by Organism specific culture	Fungus; Culture
53775-3	Hepatitis A virus Ab panel in Serum	Hepatitis A Virus Ab Panel
55449-3	Fibrin D-dimer in Platelet poor plasma	Fibrin D-Dimer
55451-9	Fibrin+Fibrinogen fragments in Platelet poor plasma	Fibrin+Fibrinogen Fragments
55452-7	Fibrinogen in Platelet poor plasma	Fibrinogen
55454-3	Hemoglobin A1c in Blood	HbA1c
55462-6	Thyrotropin in Serum or Plasma	TSH
58408-6	Erythrocyte morphology panel in Blood	Erythrocyte Morphology Panel
58431-8	Microalbumin panel - 24 hour Urine	Microalbumin; Urine; 24h
5902-2	Prothrombin time (PT) in Platelet poor plasma by Coagulation assay	Prothrombin
6301-6	INR in Platelet poor plasma by Coagulation assay	INR
6463-4	Bacteria identified in Unspecified specimen by Culture	Culture
664-3	Microscopic observation [Identifier] in Unspecified specimen by Gram stain	Microscopic; Gram Stain
6768-6	Alkaline phosphatase [Enzymatic activity/volume] in Serum or Plasma	Alkaline Phosphatase (ALP)
69405-9	Glomerular filtration rate/1.73 sq M.predicted	Glomerular Filtration Rate Predicted
69738-3	Differential panel, method unspecified in Blood	Differential
69742-5	CBC W Differential panel, method unspecified in Blood	CBC & Differential
698-1	Neisseria gonorrhoeae [Presence] in Unspecified specimen by Organism specific culture	Neisseria gonorrhoeae; Culture
718-7	Hemoglobin [Mass/volume] in Blood	Hemoglobin
8061-4	Nuclear Ab [Presence] in Serum	Nuclear Ab; Screen
890-4	Blood group antibody screen [Presence] in Serum or Plasma	Blood Group Ab Screen
XCA02342-4	Choriogonadotropin.beta subunit in Serum or Plasma	bHCG
XCA02343-2	C reactive protein in Serum or Plasma	C Reactive Protein
XCA02344-0	Calcium in 24 hour Urine	Calcium; Urine; 24h
XCA02345-7	Creatinine in 24 hour Urine	Creatinine; Urine; 24h
XCA02347-3	Follitropin in Serum or Plasma	FSH
XCA02348-1	Hepatitis B virus Ab panel in Serum	Hepatitis B Virus Ab Panel
XCA02351-5	Phosphate in 24 hour Urine	Phosphate; Urine; 24h
XCA02352-3	Potassium in 24 hour Urine	Potassium; Urine; 24h
XCA02353-1	Prostate specific Ag in Serum or Plasma	Prostate Specific Ag (PSA)
XCA02354-9	Protein in 24 hour Urine	Protein; Urine; 24h
XCA02355-6	Sodium in 24 hour Urine	Sodium; Urine; 24h
XCA02356-4	Thyroglobulin Ab in Serum	Thyroglobulin Ab
XCA02357-2	Hepatitis B virus Ag panel in Serum	Hepatitis B Virus Ag Panel
XCA02358-0	Urate in 24 hour Urine	Urate; Urine; 24h
XCA02359-8	Urea in 24 hour Urine	Urea; Urine; 24h
XCA02368-9	Thyroperoxidase Ab in Serum or Plasma	Thyroperoxidase Ab