

# about JLAC10 code

**IHE-J Laboratory committee**

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# ***JLAC10 is***

JLAC10 =

Japan Laboratory Analysis Code vesion10

Who define?

Clinical laboratory examination item coding committee made in the Japan Society of Laboratory Medicine(JSLM) has do that. The committee was started since 1962. It is from the 8th revised edition in 1990 to have become a form where use by computer was taken into consideration like now.

# Government (MHLW) Standards

MHLW : Ministry of Health, Labour and Welfare

We have 12 standards for medical informatics now.

- HS001 Standard Master for Pharmaceutical Products (HOT reference numbers)
- HS005 ICD10 Based Standard Disease Code Master for EMR
- HS007 Patient Referral Document & Clinical Data Document
- HS008 Referral Document
- HS009 IHE PDI Integration Profile, and Its Application Guideline
- HS010 ISO/TS11073-92001:2007, Health informatics -Medical waveform format
- HS011 Digital Imaging and Communications in Medicine (DICOM)
- HS012 The JAHIS Protocol for Clinical Laboratory Data Communication
- HS013 Standard Dental Disease Code Master (ICD)
- **HS014 Laboratory Test Code Master (JLAC10)**
- HS016 The JAHIS Protocol for Radiology Data Communication
- HS017 Interoperability Guideline (JJ1017 Guideline)



# Structure of JLAC10

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Analyte code					Identification code				Specimen code			Methodology code		Result Identifying code		

- **Analyte code**

It serves to classify the material subjected to test by 5 digit numbers according to the predetermined by laws. As exception, “reaction” may be substituted by “substance” in some cases.

[i.e.] occult blood reaction, TTT, ZTT

- **Identification code**

When the tests needs further classification of the analyte code above, it will be done so by applying 4 digit numbers.

[i.e.] classification of viruses, virus antibody titer, allergens, lymphocytes

- **Specimen code**

It serves to classify the specimen of a test item by applying 3 digit numbers.

- **Methodology code**

It serves to classify the Methodologies of a test item by applying 3 digit numbers.

- **Result Identifying code**

It serves to classify the test results, regardless of the number of the result, of a test item by applying 2 digit numbers.

# Example of JLAC10 (for order)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Analyte code					Identification code					Specimen code			Methodology code			

- Example**

serum herpes simplex virus IgG antibody titer(ELISA)  
 spinal fluid herpes simplex virus CF antibody titer(CF)  
 serum herpes simplex neutralizing antibody titer(NT)

- Analyte : herpes simplex **5F190**
- Identification: virus antibody **1430**  
 virus antibody IgG **1431**
- Specimen : serum **023**  
 spinal fluid **041**
- Methodology: ELISA **022**  
 CF **141**  
 virus neutralizing **151**

- JLAC10 code for order**

serum herpes simplex virus IgG antibody titer(ELISA) **5F190-1431-023-022**  
 spinal fluid herpes simplex virus CF antibody titer(CF) **5F190-1430-041-141**  
 serum herpes simplex neutralizing antibody titer(NT) **5F190-1430-023-151**

## Why JAC10 ? + Why not LOINC?

- Government and Societies decision
- Many hospitals and national database are using
- Historical reason : using more than 20 years
  - Many equipment and systems support them
  - We are familiar with JAC10 code
- No reason of change code JAC10 to LOINC
  - If LOINC code is required, we can convert them

# ***Contents***

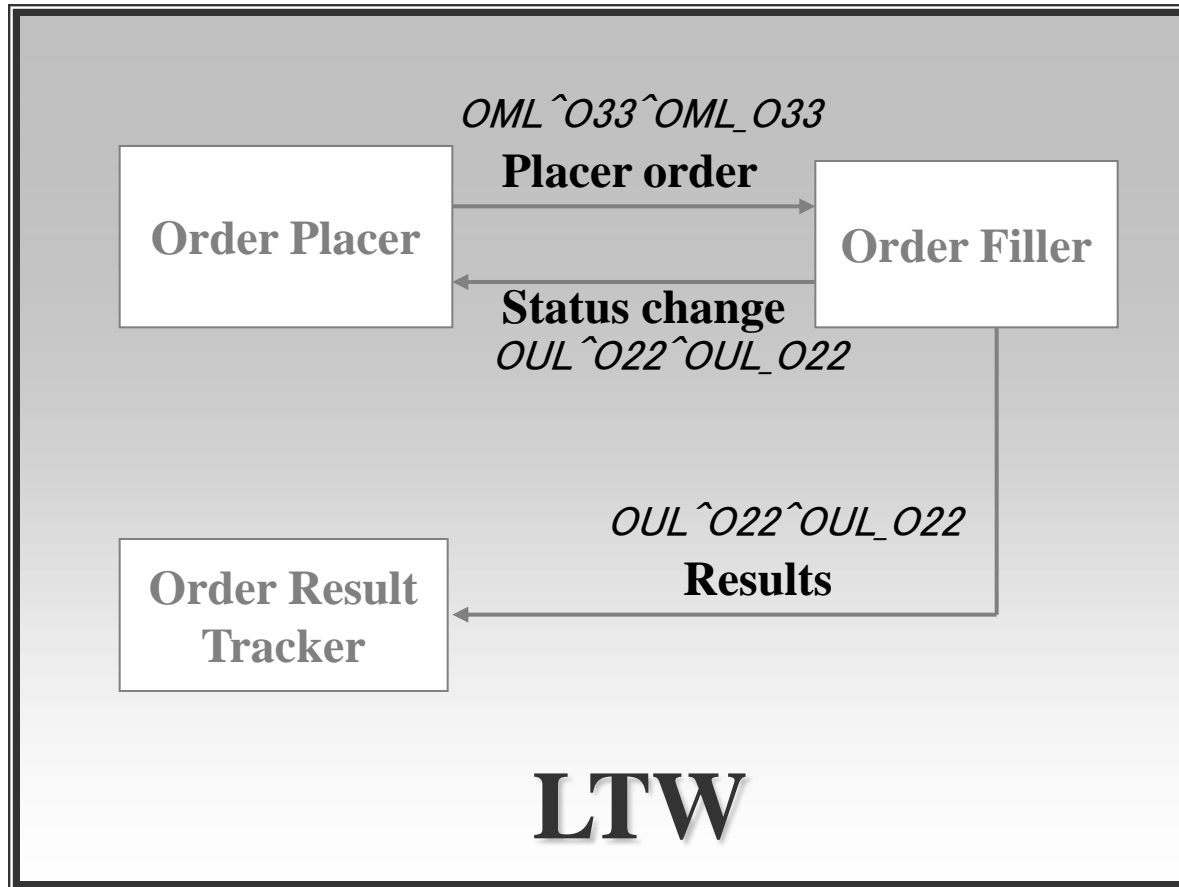
1. Outline of JLAC10 code

**2. Example in Okazaki City Hospital**

3. Future View



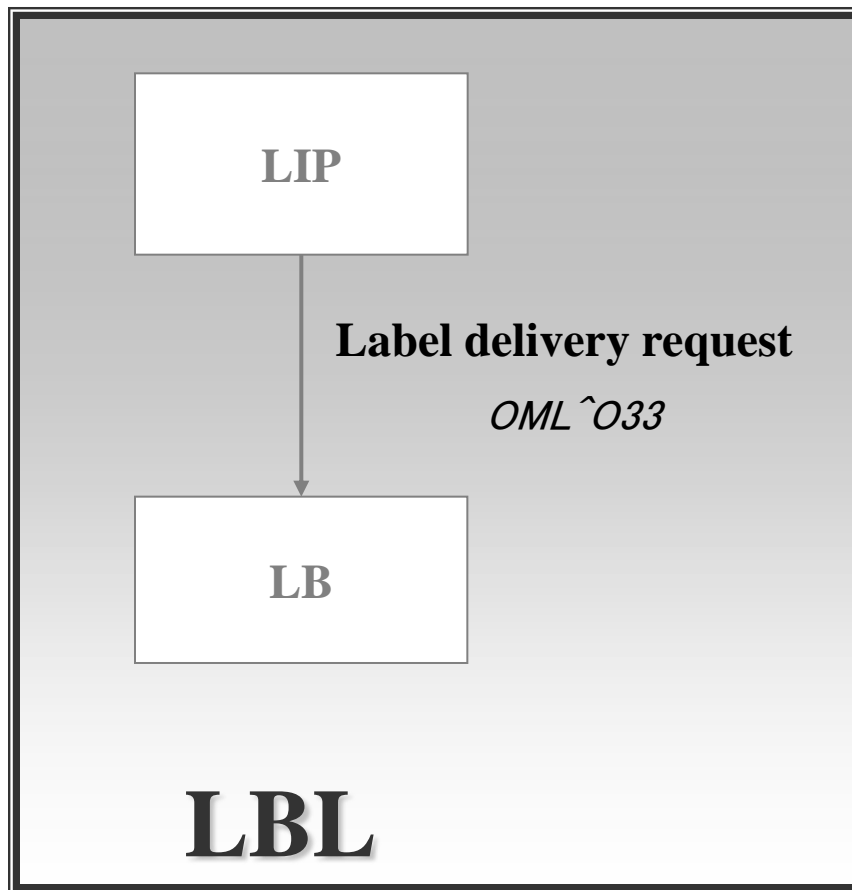
# *in case of Okazaki City Hospital*



**Order Placer**  
Fujitsu Egmain-GX

**Order Filler**  
A&T Clinilan GL2

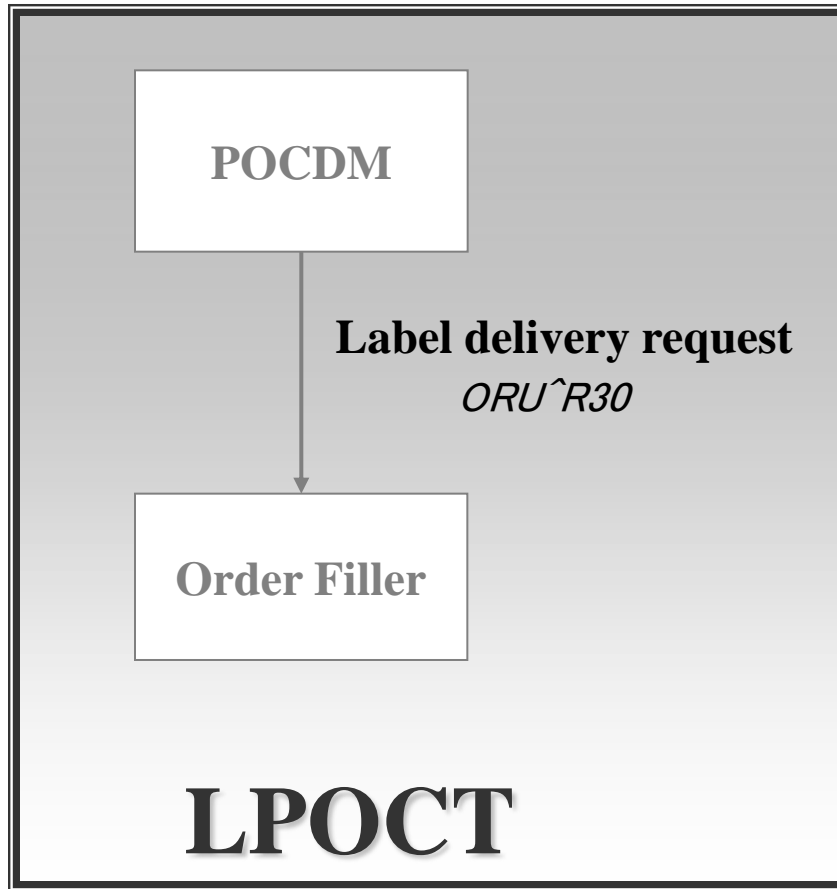
# *in case of Okazaki City Hospital*



**Label Information Provider**  
**A&T Clinilan GL2**

**Label Broker**  
**Technomedica BC-ROBO**

# *in case of Okazaki City Hospital*



Point Of Care Data Manager  
HORIBA LP-181 (RoseLink)

Order Filler  
A&T Clinilan GL2

# *in case of Okazaki City Hospital*

MSH|^~¥&|EGMAIN-GX|HIS|GW|GW|20131001000700||OML^O33^OML\_O33|20131001000700285|P|2.5|||||~ISO  
IR87||ISO 2022-1994

PID||| ^^^^PI||AAA^B^~~~~L^I^ ~ ^~~~~L^P||20131016|M|||^444-0001^H^愛知県岡崎市  
|23|^PRN^PH^~~~~~99-9999

PV1||I|03N^3NC11^02^^N|||999999^ ^ ~~~~~L^~~~~I|||04|||||||||||||||||||||20130930211000

SPM|1|201303031521122&OP||022^血漿^99M01|||||||||201310010000|||||022^緊急化学 緑^99C01

ORC|NW|13X010303152100|||||20131001000700||888888^ ^ ~~~~~L^~~~~I|03N^~~~~N|||04^循環器内科  
^JSHR|B3D0401^B3D0401^JSHR|||愛知県岡崎市^^^555-4444^JPN|099-999-9999|||||I

TQ1|1|||||20131001||R

OBR|1|13X010303152100||E999^検体検査^IOB\_Obgrp||20131001|201310010000|||||^JC10^^L|999999^ ^  
~~~~~L^~~~~I^ ^ ~~~~~L^~~~~P|||||||||~~~~~&&JSHR

OBX|1||3A0150000022271^急 アルブミン^JC10|||||O||R

OBX|2||3A0100000022271^急 総蛋白^JC10|||||O||R

OBX|3||3B0350000022272^急 AST(GOT)^JC10|||||O||R

OBX|4||3B0450000022272^急 ALT(GPT)^JC10|||||O||R

OBX|5||3B0500000022272^急 LDH^JC10|||||O||R

OBX|6||3B0100000022272^急 CK^JC10|||||O||R

OBX|7||3B0150000022051^急 CK-MB^JC10|||||O||R

# *in case of Okazaki City Hospital*

OBX|8||3H0100000022261^急 ナトリウム^JC10|||||||O||R  
OBX|9||3H0150000022261^急 カリウム^JC10|||||||O||R  
OBX|10||3H0200000022261^急 クロール^JC10|||||||O||R  
OBX|11||3C0250000022272^急 尿素窒素^JC10|||||||O||R  
OBX|12||3C0150000022271^急 クレアチニン^JC10|||||||O||R  
OBX|13||3C0200000022271^急 尿酸^JC10|||||||O||R  
OBX|14||5C0700000022062^急 CRP^JC10|||||||O||R  
SPM|2|201303031521019&OP||019^全血添^99M01|||||||201310010000|||||||019^血算 紫^99C01  
ORC|NW|13X010303152100|||||20131001000700||888888^岡崎^市^~~~~~L~~~~~I|03N~~~~~N||||04^循環器内科  
^JSHR|B3D0401^B3D0401^JSHR|||愛知県岡崎市^55-4444^JPN|099-999-9999|||||I  
TQ1|1|||||20131001||R  
OBR|1|13X010303152100||E999^検体検査^IOB\_Obgrp||20131001|201310010000|||||||^JC10^^L|888888^岡崎^市  
~~~~~L~~~~~I^オカザキ^シ^~~~~~L~~~~~P|||||||~~~~~&&JSHR  
OBX|1||2A9900000019301^血算^JC10|||||||O||R

# in case of Okazaki City Hospital

MSH|^~\&|GL2|検査部|PC-  
ORDERING/AD|HIS|20131001011927490||OUL^R22^OUL\_R22|20131001011927490685|P|2.5|||||~ISO  
IR87||ISO 2022-1994

PID|1||0000123456^^^^PI|| ^ ^^^^^L^I~ ^ ^^^^^L^P||19341224|M|||^^^^444-0001^^H^愛知県岡崎市  
||^99-9999

PV1|1|O|59^^^^C|||||59

SPM|1|201397149256099&OP&97149256099^20131001005201\_01&OP&97149256099||018^全血  
^99M01|||||201310010118|20131001011930|||||1|099^その他^99C01

SAC|||97149256099

OBR|1|13X019714925600|20131001005201|01^Laboratory|||20131001011843|||||^血糖^指示医  
^^^^L^^^^I^ケットウ^シジイ^^^^L^^^^P|||||R|||||1

ORC|SC|13X019714925600|20131001005201|20131001000496|A|||20131001011927||^血糖^指示医  
^^^^L^^^^I^ケットウ^シジイ^^^^L^^^^P|59^^^^C|||59^血糖指示^99R01|||岡崎市民病院  
^^^^0000000000|||||O

TQ1|1|||||20131001||R

OBX|1|NM|3D01000001826101^病棟血糖(POCT)^JC10||68|||||R||R|20131001011931|11^病棟血糖  
^99D01|||955101|20131001011931

OBX|2|ST|3D01000001826103^血糖測定時間(POCT)^JC10||13/10/01 01:18|||||R||R|20131001011931|11^  
病棟血糖^99D01|||955101|20131001011931

OBX|3|ST|3D01000001826114^血糖測定者(POCT)^JC10||09W019|||||R||R|20131001011931|11^病棟血糖  
^99D01|||955101|20131001011931

# used code

|                    |               |
|--------------------|---------------|
| 3A0150000022271 01 | Serum Albumin |
| 3A0100000022271 01 | Total Protein |
| 3B0350000022272 01 | AST           |
| 3B0450000022272 01 | ALT           |
| 3B0500000022272 01 | LD            |
| 3B0100000022272 01 | CK            |
| 3B0150000022051 01 | CK-MB         |
| 3H0100000022261 01 | Sodium        |
| 3H0150000022261 01 | Potassium     |

# used code

|                    |               |
|--------------------|---------------|
| 3H0200000022261 01 | Chloride      |
| 3C0250000022272 01 | Urea Nitrogen |
| 3C0150000022271 01 | Creatinine    |
| 3C0200000022271 01 | Uric Acid     |
| 5C0700000022062 01 | CRP           |
| 3D0100000018261 01 | Glucose       |



# Problem

- Patient's information about out or in.
  - ⇒ Patient's information data was not used smoothly.
- Which data show right date?
  - ⇒ More discussion and explaining was needed between OP vendor and OF vendor and user about the date which each system using.
- 15 digit running make trouble.
  - ⇒ OP vendor's experience was lacking.

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# Future view

## The Subject is

- To find appropriate code is not easy  
In case whether newly released test or not
- To change under running code  
If analyzer or reagents are changed, the code may be changed too.
- For whom should I consult about ?
- Not suitable for database use



# *Future view*

## **Congress of standardization to defy and use of clinical laboratory's examination code**

The congress aims to improve the subject for reservation of the compatibility in a clinical examination, standardization promotion of a medical information system, especially the promotion of utilization in a medical institution, mainly concern with code.



1. To revise the oversight
2. To secure the organization
3. To secure user's convenience

etc



Integrating the *Healthcare Enterprise - Japan*



日本IHE協会 <http://www.ihe-j.org>