

## Criteria category (Revised on April 1, 2022)

source: Japan Society of Ningen Dock

Item		A: Normal	B: Slightly abnormal	C: Requires re-examination and life improvement *1	D: Medical consultation required (D1: Treatment needed, D2: Detailed examination needed) *2	E: On treatment *11
Body mass index (BMI)	kg/m <sup>2</sup>	18.5–24.9		18.4 or less, 25.0 or greater		
Abdominal circumference	cm					
	Male	84.9 or less		85.0 or greater		
	Female	89.9 or less		90.0 or greater		
Blood pressure (2 measurements: average)	mmHg *1					
	Systolic	129 or less	130–139	140–159	160 or greater	
	Diastolic	84 or less	85–89	90–99	100 or greater	
Heart rate (supine position)	beats/minute	45–85		40–44, 86–100	39 or less, 101 or greater	
Visual acuity (use corrected vision for judgment if measured both unaided and corrected) (use worst side for judgment)		1.0 or greater		0.7–0.9	0.6 or less	
Hearing acuity	dB					
	1000 Hz	30 or less		35	40 or greater	
	4000 Hz	30 or less		35	40 or greater	
Respiratory function (spirometry) Describe down to the first decimal place *3	Forced expiratory volume % in one second (%)	70.0 or greater			69.9 or less	
	Forced expiratory volume % in 1 second (percentage of expected forced expiratory volume in 1 second)	80.0 or greater (forced expiratory volume % in 1 second is 70.0% or greater)		79.9 or less (forced expiratory volume % in 1 second is 70.0% or greater) or 80.0 or greater (forced expiratory volume % in 1 second is 69.9% or less)	79.9 or less (forced expiratory volume % in 1 second is 69.9% or less)	
	Percent lung capacity (%)	80.0 or greater			79.9 or less	
Total protein	g/dL	6.5–7.9	8.0–8.3	6.2–6.4	6.1 or less, 8.4 or greater	
Albumin	g/dL *4	3.9 or greater		3.7–3.8	3.6 or less	
Creatinine mg/dL (Prioritize eGFR for judgment) (Describe down to the second decimal place)	Male	1.00 or less	1.01–1.09	1.10–1.29	1.30 or greater	
	Female	0.70 or less	0.71–0.79	0.80–0.99	1.00 or greater	
eGFR (mL/min/1.73 m <sup>2</sup> ) (Describe down to the first decimal place)		60.0 or greater		45.0–59.9	44.9 or less	
Uric acid	mg/dL	2.1–7.0	7.1–7.9	2.0 or less, 8.0–8.9	9.0 or greater	
HDL cholesterol	mg/dL	40 or greater		35–39	34 or less	
Non-HDL cholesterol	mg/dL *5	90–149	150–169	170–209	89 or less, 210 or greater	
LDL cholesterol	mg/dL	60–119	120–139	140–179	59 or less, 180 or greater	
Triglyceride	mg/dL *6	30–149	150–299	300–499	29 or less, 500 or greater	
AST (GOT)	U/L	30 or less	31–35	36–50	51 or greater	
ALT (GPT)	U/L	30 or less	31–40	41–50	51 or greater	
γ-GT (γ-GTP)	U/L	50 or less	51–80	81–100	101 or greater	
Fasting plasma glucose	mg/dL		1) FPG: 100–109, and HbA1c: 5.9 or less	1) FPG: 110–125		
Fasting blood glucose		FPG: 99 or less and HbA1c: 5.5 or less	2) FPG: 99 or less, and HbA1c: 5.6–5.9 1) or 2)	2) HbA1c: 6.0–6.4		
HbA1c	% *7			3) FPG: 126 or greater, and HbA1c: 6.4 or less	FPG: 126 or greater and HbA1c: 6.5 or greater	
				4) FPG: 125 or less and HbA1c: 6.5 or greater One of 1) to 4)		
White blood cell count	10 <sup>3</sup> /μL	3.1–8.4	8.5–8.9	9.0–9.9	3.0 or less, 10.0 or greater	
Hemoglobin	g/dL					
	Male	13.1–16.3	16.4–18.0	12.1–13.0	12.0 or less, 18.1 or greater	
	Female	12.1–14.5	14.6–16.0	11.1–12.0	11.0 or less, 16.1 or greater	
Platelet count	10 <sup>4</sup> /μL	14.5–32.9	12.3–14.4, 33.0–39.9	10.0–12.2	9.9 or less, 40.0 or greater	
CRP (Describe down to the second decimal place)	mg/dL	0.30 or less	0.31–0.99		1.00 or greater	
Serologic test for syphilis		Negative			Positive	
HBs antigen		Negative			Positive	
HCV antibody		Negative			Positive	
Urine protein		(–)	(±)	(+)*8	(2+) or greater	
Urine occult blood		(–)	(±)	(+)*8	(2+) or greater	
Urine sugar		(–)	(±) or greater			
Urinary sediment *9						
Stool occult blood 2-day method	Day 1, Day 2	(–)			(+)	
Uterine cervical cytology *10	Bethesda classification	NILM		Inadequate specimen=indeterminate (immediately re-examination) **10	ASC-US, ASC-H, LSIL, HSIL/ CIN2, HSIL/CIN3, SCC, AGC, AIS, Adenocarcinoma, Other malig	

- \*1 The expression of "C: Requires follow-up" will be revised. Clearly state the timing of re-examination such as "in X months" to clearly instruct examinees in the actions they should take. Imaging and physiological tests may be performed again in 1 year. No ambiguous descriptions shall be made, such as follow-up, periodical tests, and hospital visit required if any symptom occurs. For blood pressure, blood pressure measurement at home is recommended rather than repeated tests at a medical institution.
- \*2 The expression of "D: Medical care needed" will be revised. Because the question of whether to perform detailed examination or to give treatment will be decided by the referral site, D1 and D2 will be combined. "Detailed examination needed" or "Treatment needed" may be selected according to the high/low values and findings.
- \*3 Respiratory function test may be subtly influenced by the relationship between the tester and the subject. The severity of obstructive disorder will be determined in combination of forced expiratory volume% in 1 second and % forced expiratory volume in 1 second. Forced expiratory volume% in 1 second of less than 70% and % forced expiratory volume in 1 second of 80% or greater is determined to be mild, and 79% or less is determined to be moderate or greater. Obstructive, restrictive, and mixed ventilatory impairment will be determined by combining forced expiratory volume% in 1 second and percent lung capacity.
- \*4 See below for differences between albumin BCG and modified BCP. <http://www.jslm.org/others/news/20131225albumin.pdf>
- \*5 (1) In the case of triglyceride 400 mg/dL or greater and/or postprandial blood: determine based on non-HDL cholesterol instead of LDL cholesterol. (2) In the case of triglyceride less than 400 mg/dL and fasting blood: do not use non-HDL cholesterol level, and determine based on LDL cholesterol level. Of note, if LDL cholesterol, triglyceride, and HDL cholesterol are all determined as A and only non-HDL cholesterol is not determined as A, the category of lipid will be determined as B. Total cholesterol is used for calculation of non-HDL cholesterol, and determination is not performed.
- \*6 Blood shall be withdrawn in the fasting state so not to influence blood glucose and lipid
- \*7 OGTT is recommended if determined as fasting blood glucose, HbA1c (NGSP) combined category C 1 or 2

If determined as 3 or 4, life style improvement shall be instructed, and its result shall be re-evaluated in a short period.

- \* 8 If urine protein is (+) and urine occult blood is (+), urine protein will be determined as D.
- \* 9 For urinary sediment, see the table on criteria category in the attached table.
- \* 10 Brush, spatula, and cyto-pick etc. shall be used as a sampling equipment instead of swabs; sample shall be stored using liquid-based cytology (LBC) if possible  
Cervical cytology specimens shall be only collected by a physician. Self-collection is not allowed. (Cited from) <https://www.ningen-dock.jp/14185>
- \*\* 10 Inadequate specimens shall be promptly re-examined. Patients with ASC-US will receive an HPV-DNA test or repeated cytology 6 months and 12 months later, or receive a detailed examination by colposcopy.
- \* 11 Determine as E if on treatment
- \*\* Standard range of intraocular pressure is 9-20 mmHg, and 70 percent of glaucoma is within this range; therefore, criteria category is not set
- \*\* Up to moderate increase of total bilirubin will be proportionate to the reduction of mortality, and will be a prevention for arteriosclerosis; therefore, criteria category is not set
- \*\* As the JSCC method was changed to the IFCC method for ALP from FY2020, the effect of blood type has been decreased; however, the criteria category for ALP was not set as before as of April 2022 because there were no descriptions about the effect of menopause.  
Reference: <http://jsc.jp/file/2019/alpld2.pdf>/<http://jsc.jp/file/2019/alpld4.pdf>
- \*\* See the Japan Society of Ningen Dock website for the screening decision manual on images from chest X-ray, upper gastrointestinal tract X-ray, upper gastrointestinal endoscopy, abdominal ultrasound, electrocardiogram, and fundus.

## Urinary Sediment Criteria Category

Type	Description	Criteria	A	B	C	D
Red blood cells *	Observed in some renal and urinary tract diseases and systemic bleeding diseases. Determination is made based on the calculated count (same hereinafter).	C-D	Less than 5/HPF		5-9/HPF	10-/HPF
White blood cells	Observed in urinary tract bacterial infections.	B-D	Less than 5/HPF	5-9/HPF		10-/HPF When there is a clinical symptom in the urinary tract
Renal tubular epithelial cells	Renal tubular epithelial cells detached in the kidney and often observed in kidney diseases.	D	Less than 1/HPF			1-/HPF
Urothelial epithelial cells	Cells detached from a part of the kidney to a part of the ureter, bladder, and urethra.	B	Less than 1/HPF	1-/HPF		
Squamous epithelial cells	Epithelial cells detached from around the external urethral orifice.	B	Less than 1/HPF	1-/HPF		
Oval fat body	Cells containing fat granules that appear in association with renal diseases such as nephrotic syndrome.	D	0/WF			1-/WF
Intracytoplasmic inclusion-bearing cells	Degenerative cells that appear during inflammation of the urinary system.	D	Less than 1/HPF			1-/HPF
Intranuclear inclusion-bearing cells	Cells that develop in association with DNA viral infections caused by herpes virus, cytomegalovirus, etc.	D	0/WF			1-/WF
Atypical cells	Cells that may be suggestive of cancer.	D	0/WF			1-/WF
Casts	Particles with paralleled margins with rounded ends. They are an indicator of kidney disease. Casts have many types as follows:					
Hyaline casts	A kind of protein accumulated in the renal tubular lumen. May be found even in healthy individuals after heavy exercise.	B-C	0/WF	1-4/WF	5-/WF	
Epithelial cell casts	Casts which enclose renal tubular epithelial cells detached from the renal tubules by damage.	D	0/WF			1-/WF
Granular casts	Casts which enclose granular components derived from degenerated cells.	D	0/WF			1-/WF
Waxy casts	Thick casts formed after granular casts have gradually disintegrated due to long-term obstruction of the renal tubular lumen. May be found in chronic renal failure.	D	0/WF			1-/WF
Fatty casts	Casts containing fat granules and oval fat bodies. They are found at high urine protein levels.	D	0/WF			1-/WF
RBC casts	Casts containing red blood cells that are often seen when bleeding occurs in the kidneys (glomerulus).	D	0/WF			1-/WF
WBC casts	Casts containing a large amount of white blood cells and which may be associated with glomerulonephritis and pyelonephritis.	D	0/WF			1-/WF
Vacuolar-denatured casts	Casts often containing small and large vacuoles. Often found in severe diabetic nephropathy.	D	0/WF			1-/WF
Salt/crystal casts	Casts enclosing phosphate, uric acid salts, crystals of calcium oxalate, etc.	B	0/WF	1-/WF		
Bacteria	Presence of bacteria suggests urinary tract infection. Not problematic if no white blood cells are found at the same time.	B	—	1+ or greater		
Fungus	Type of mold that disappears without any special treatment, but requires caution if the patient has diabetes or other conditions with decreased immune function.	B	—	1+ or greater		
Protozoa	Some protozoa such as trichomonas cause sexually transmitted diseases. Treatment is required.	D	—			1+ or greater

\* If the determination of urinary occult blood and that of urinary red blood cells differ, priority shall be given to the determination of urinary red blood cells. At the time of complete medical checkup, it is not necessary to distinguish between glomerular and non-glomerular red blood cells, although it is preferable to distinguish them at the time of re-examination/detailed examination.

Abbreviations: HPF (high power field), WF (whole field)