

HEALTH EXAMINATION REPORT

Personal Information

Name	DEMO-005
I.D. Number	DEMO-005
Gender	Male
Date of Birth	1959/07/10
Age	64
Date of Exam	2024/05/19
Exam Package	Customized Package

Physician							
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Summary & Suggestions

01. Diagnosis:

Impression: Mild Obesity

Evidence-Based on: Body Mass Index (BMI) 28.1 kg/m², Body Weight 78.9 kg, Body Fat 24.3%, Waist Circumference 92 cm

Interpretations and Suggestions: To manage mild obesity, a combination of dietary adjustments focusing on nutrient-dense foods and regular physical activity is recommended. Consider consulting a nutritionist for personalized dietary guidance and a fitness professional to create an exercise regimen that is safe and effective for weight loss and overall health improvement.

02. Diagnosis:

Impression: Stage 1 Hypertension

Evidence-Based on: Systolic Blood Pressure 143 mmHg, Diastolic Blood Pressure 91 mmHg Interpretations and Suggestions: Stage 1 hypertension suggests a need for lifestyle modifications such as reducing sodium intake, increasing physical activity, and managing stress. Consistent monitoring of blood pressure and adherence to antihypertensive medication, if prescribed, are important to prevent further cardiovascular risks.

03. Diagnosis:

Impression: Microcytic Anemia, likely Thalassemia Minor

Evidence-Based on: RBC 6.8 x10⁶/uL, MCV 63.8 fl, MCH 18.5 pg, MCHC 29.0 g/dL Interpretations and Suggestions: The laboratory findings suggest a diagnosis of Microcytic Anemia, likely Thalassemia Minor, given your high red blood cell count but low MCV, MCH, and MCHC. This condition often does not require treatment; however, regular monitoring of hemoglobin levels and avoidance of unnecessary iron supplements are advisable unless specifically recommended by a physician.

04. Diagnosis:

Impression: Eosinophilia

Evidence-Based on: Eosinophils 9.3%

Interpretations and Suggestions: Elevated eosinophils can indicate an allergic reaction, parasitic infection, or less commonly, certain types of leukemia. It is recommended to undergo further evaluation to determine the underlying cause, which may include specific allergen testing, stool studies for parasites, and a consultation with a hematologist if indicated.

05. Diagnosis:

Impression: Gilbert's Syndrome Indicated by Indirect Hyperbilirubinemia



Evidence-Based on: Total Bilirubin 1.8 mg/dL, Indirect Bilirubin 1.5 mg/dL Interpretations and Suggestions: The pattern of bilirubin elevation suggests Gilbert's Syndrome, a benign condition that typically does not require treatment. However, it's still important to avoid potential liver toxins including excessive alcohol consumption and certain medications known to affect liver function. Regular liver function tests may be conducted to monitor your condition over time.

06. Diagnosis:

Impression: Prediabetes

Evidence-Based on: Fasting Glucose 104 mg/dL, HbA1c 6.2%

Interpretations and Suggestions: These values indicate prediabetes. Implementing lifestyle changes such as adopting a balanced diet low in refined sugars and carbohydrates, regularly exercising, and periodically monitoring blood glucose levels are crucial steps to delay or prevent the onset of type 2 diabetes. Additionally, a consultation with a diabetes educator or endocrinologist might be beneficial.

07. Diagnosis:

Impression: Hyperlipidemia

Evidence-Based on: Total Cholesterol 227 mg/dL, LDL-Cholesterol 150 mg/dL, T-Chol/HDL-Chol Ratio 5.2

Interpretations and Suggestions: The cholesterol levels suggest hyperlipidemia, increasing your risk for atherosclerosis and heart disease. A heart-healthy diet, rich in fruits, vegetables, whole grains, and lean proteins, along with regular exercise, is recommended. Depending on your risk factors and overall cardiovascular risk, medication may also be prescribed to help manage your cholesterol levels.

08. Diagnosis:

Impression: Hyperthyroidism

Evidence-Based on: TSH 0.02 uIU/mL, Free T4 1.98 ng/dL

Interpretations and Suggestions: The suppressed TSH and elevated free T4 levels suggest hyperthyroidism, which may require antithyroid medications or other treatments. Consultation with an endocrinologist for precise diagnosis and management is essential. Monitoring thyroid function tests regularly as advised by your specialist is crucial for appropriate management.

09. Diagnosis:

Comprehensive summary

Based on the comprehensive analysis of your conditions, it seems you are dealing with several health issues that require attention, including mild obesity, stage 1 hypertension, microcytic

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anemia likely due to Thalassemia Minor, eosinophilia, Gilbert's syndrome indicated by indirect hyperbilirubinemia, prediabetes, hyperlipidemia, and hyperthyroidism. A multidisciplinary approach involving lifestyle modifications, close monitoring, and possibly medication is crucial for managing these conditions effectively. Collaboration with various specialists, including an endocrinologist, gastroenterologist, and possibly a hematologist, will be key to optimizing your health outcomes. Regular follow-up with your primary care physician to integrate the management plans from different specialists is recommended.



Nutrition Instructions

Diet Suggestions:

- Incorporate a high fiber diet with plenty of fruits, vegetables, whole grains, and legumes to manage prediabetes and hyperlipidemia, and to aid in weight loss.
- Choose lean protein sources and healthy fats, such as fish rich in omega-3 fatty acids, to support heart health.
- Limit intake of salt and processed foods to help control blood pressure.
- Avoid foods high in refined sugars and carbohydrates to help manage blood glucose levels.
- Opt for low glycemic index foods to stabilize blood sugar.
- Ensure adequate hydration throughout the day.

Supplement Recommendations:

- Consider a daily multivitamin that does not exceed 100% of the Daily Value of iron, unless otherwise directed by your physician, due to Thalassemia Minor.
- Omega-3 fatty acids supplement could be beneficial for heart health.
- A Vitamin D supplement may be beneficial, especially if your lifestyle or geographic location limits sun exposure.
- Magnesium supplements could help in managing hypertension and might assist in improving sleep quality.

Lifestyle Medicine Suggestions:

- Adopt a whole-food, plant-predominant eating pattern focusing on nutrient density to support weight management, improve lipid profile, and manage blood sugar levels.
- Engage in regular physical activity, aiming for at least 150 minutes of moderate aerobic exercise per week, along with muscle-strengthening activities on two or more days per week. This will aid in managing obesity, hypertension, and prediabetes.
- Ensure restorative sleep by maintaining a consistent sleep schedule, creating a sleep-conducive environment (cool, dark, and quiet), and avoiding stimulants and screens before bedtime.
- Manage stress effectively through mindfulness techniques, such as meditation, deep breathing exercises, or yoga. These practices can help in reducing blood pressure and improving overall well-being.
- Avoid risky substances by limiting alcohol consumption and avoiding smoking or the use of illicit drugs. Given Gilbert's Syndrome, minimizing alcohol intake is particularly important to avoid additional liver stress.
- Foster positive social connections by maintaining close relationships with friends and family. Participating in community or group activities that interest you can also provide emotional support and improve mental health.



Personal and Family History

Chief complaint

No discomfort symptoms in the past three months.

Past medical history

Personal history of diseases: Hypertension, Periodontal disease

Medication and supplement history: Anti-hypertensive drugsAntihyperlipidemicsAspirinVitamin AB-

complex vitaminsVitamin CVitamin EFish OilProbioticsCoenzyme Q10

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Family history

Nasopharyngeal carcinoma (NPC)

Lifestyle habits (Smoking, drinking and betel chewing history)

Smoking habits in the past month: Never smoked.

Drinking habits in the past month: Abstain from alcohol.

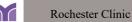
Betel nut chewing habits in the past six months: No betel nut chewing.

Coffee consumption habits: Yes.

Average weekly working hours in the past six months: 48

Average weekly working hours in the past one month:42, daily working hours: 6

Weekday sleep duration: Average daily sleep hours: 7



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Physical Analysis

	Vital Signs					
Exam Item	Result	Unit	Range Ref.			
Body Height	66	inches				
66 inches	Height measurement is a simple yet crucial parameter in assessing growth patterns and potential disorders. Abnormally tall stature may indicate gigantism, often caused by excessive growth hormone, while significantly short stature could suggest dwarfism, which may result from various genetic or endocrine conditions.					
Body Weight	173.9	lbs				
173.9 lbs	Weight measurement is a fundamental aspect of health assessment, indicating nutritional status and potential health risks. Overweight status can signal an increased risk of conditions like cardiovascular disease, diabetes, and joint problems, while low body weight might indicate malnutrition or underlying health issues such as eating disorders or chronic illnesses.					
Body Mass Index	28.1	/	BMI 18.5~23.9			
18.5 23.9	Body Mass Index (BMI) is a key indicator of body weight relative to height, used to categorize individuals as underweight, normal weight, overweight, o obese. A high BMI points towards overweight or obesity, increasing the risk chronic diseases like diabetes, heart disease, and joint problems. Conversely, low BMI may indicate undernutrition or other health issues.					
Body Fat Composition	24.3	%	Male 14~23; Female 17~27			
24.3 14 23	Body fat composition assessment is crucial for understanding overall health, particularly in evaluating obesity or malnutrition. Increased body fat is associated with higher risks of cardiovascular diseases, diabetes, and certain cancers, while low body fat can indicate malnutrition or underlying health issues.					
Waist Circumference	36.2	inches	Male35.4; Female31.5			
36.2 35.4	Waistline measurement is a vital indicator of health, particularly for assessing obesity and related health risks. An increased waist circumference is often associated with a higher risk of metabolic disorders, cardiovascular diseases, and type 2 diabetes, reflecting central obesity. Conversely, a very low waist circumference might indicate undernutrition or other health concerns.					
Hip Circumference	38.2	inches				
38.2 inches	Hipline measurement is a valuable health assessment tool, particularly in determining body fat distribution. An increased hip circumference may indicate a higher amount of subcutaneous fat, often associated with lower risk of metabolic complications compared to abdominal fat. Conversely, a low hip circumference could suggest insufficient body fat, potentially leading to health issues.					



Rochester Clinic Name: DEMO-005 ID: DEMO-005 Date of Exam: 2024-05-19 Breath Rate 16 Times/Min 12~18 Times/Min 16 12 18 Pulse Rate 80 50~100 Times/Min Times/Min Pulse rate measurement is essential in cardiovascular assessment. Tachycardia, or a rapid pulse rate, can indicate conditions such as fever, dehydration, or heart 80 disease. Bradycardia, or a slow pulse rate, may suggest underlying cardiac issues, electrolyte imbalances, or effects of certain medications. However, pulse rate must be interpreted within the context of overall health, activity level, and other clinical findings, as various physiological and pathological factors can 50 100 influence it. 36.5 $^{\circ}C$ 36~37.5 °C **Body Temperature** 36.5 Body temperature measurement is crucial for detecting abnormalities. Elevated temperature may indicate infections, autoimmune diseases, or tumor fevers, signaling a systemic response. Conversely, low body temperature could suggest infections or hypothermia, indicating potential exposure or metabolic disorders. 36 37.5 Systolic BP-Left 143 <140 mmHg Systolic blood pressure measurement is vital for cardiovascular health 143 assessment. Elevated systolic pressure suggests hypertension, a risk factor for heart disease, stroke, and kidney problems. Conversely, low systolic pressure indicates hypotension, which can signal underlying conditions like dehydration, heart problems, or endocrine disorders. 90 139 Diastolic BP-Left 91 <90 mmHg Diastolic blood pressure measurement is critical for assessing cardiovascular health. High diastolic pressure may indicate hypertension, associated with increased risk of heart disease, stroke, and kidney issues. Low diastolic pressure can suggest hypotension, potentially indicating dehydration, blood loss, or heart conditions. 40 89 Systolic BP-Right 134 mmHg <140 Systolic blood pressure measurement is vital for cardiovascular health 134 assessment. Elevated systolic pressure suggests hypertension, a risk factor for heart disease, stroke, and kidney problems. Conversely, low systolic pressure indicates hypotension, which can signal underlying conditions like dehydration, heart problems, or endocrine disorders. 90 139 Diastolic BP-Right 83 mmHg <90 Diastolic blood pressure measurement is critical for assessing cardiovascular 83 health. High diastolic pressure may indicate hypertension, associated with increased risk of heart disease, stroke, and kidney issues. Low diastolic pressure can suggest hypotension, potentially indicating dehydration, blood loss, or heart conditions. 40 89



Physical Examination						
Exam Item	Result	Unit	Range Ref.			
Physical Exam - Skin	Normal		Normal			
Physical Exam - HEENT	Normal		Normal			
Physical Exam - Neck	Normal		Normal			
Physical Exam - Chest/Lungs	Normal		Normal			
Physical Exam - Breast	Normal		Normal			
Physical Exam - Heart/Vascular	Normal		Normal			
Physical Exam - Abdomen	Normal		Normal			
Physical Exam - Genitalia/Hernia	Normal		Normal			
Physical Exam - Rectal	Normal		Normal			

Vision & Hearing Screen

Visual Acuity and Intraocular Pressure Screening						
Item	Result	Range Ref.				
VA-left	-	0.7				
VA-right	-	0.7				
Wear Eyeglasses-left	0.9	0.7				
Wear Eyeglasses-right	0.8	0.7				
Ishihara Test for Color Vision	Normal					
IOP-left	15	<20				
15						
IOP-right	15	<20				
15						

Hearing Screening						
Item Result						
40db,500HZ,Left ear	Normal					
40db,1000HZ,Left ear	Normal					
40db,2000HZ,Left ear	Normal					
40db,4000HZ,Left ear	Normal					
40db,500HZ,Right ear	Normal					
40db,1000HZ,Right ear	Normal					
40db,2000HZ,Right ear	Normal					
40db 4000HZ Right ear	Normal					

Hematology Screening

	Complete Blood C	Count			
Item	Result	Range Ref.	Unit		
WBC	5.20	3.50~10.00	10e3/UL		
3.5 10	The White Blood Cell (WBC) count is a crucial laboratory test used to assess the body's immune response and detect conditions such as infections, leuken and myelodysplasia. Elevated WBC counts may indicate bacterial infections leukemia, or physical stress, while reduced counts can suggest viral infection liver cirrhosis, or compromised immune function. While valuable for identifying leukopenia (low WBC) and leukocytosis (high WBC), this test halimitations and should be interpreted in conjunction with clinical findings an other diagnostic tests.				
RBC	6.8	M:4.20~6.20 F:3.70~5.50	10e6/UL		
6.8	The Red Blood Cell (RBC) count is a vital test for evaluating anemia, polycythemia, and overall red blood cell loss. High RBC counts can be indicative of conditions such as polycythemia vera, dehydration, or chronic cardiopulmonary diseases, while low counts may signal anemia, leukemia, malnutrition, or pregnancy. This test is essential for diagnosing and monitorithese conditions. However, its accuracy can be compromised by the presence cold agglutinins, which may lead to falsely low RBC counts.				
Нь	12.6	M:12.3~18.3 F:11.3~15.3	g/dl		
12.6	The Hemoglobin (Hb) test is crucial for assessing anemia, blood loss, hydratio status, polycythemic conditions, and treatment efficacy. Elevated Hb levels may indicate high erythropoietin activity, dehydration, or heavy smoking, whi low levels often suggest anemia, leukemia, or chronic infections. Despite its clinical significance, the test's accuracy can be affected by hyperlipemic plasma, particularly in conditions like Fredrickson and Lees types I and V with chylomicronemia, or extremely high white blood cell counts. These factors may falsely elevate hemoglobin results, necessitating correction through specialized laboratory techniques.				
Hct	43.4	M:39.0~53.0 F:33.0~47.0	%		
39 53	The Hematocrit (Hct) test measures the proportion of red blood cells in blood, playing a vital role in diagnosing and monitoring conditions like anemia, polycythemia, and hydration status. Elevated hematocrit levels can be seen in situations with increased erythropoietin activity, dehydration, or heavy smoking. Conversely, low hematocrit levels may indicate anemia, leukemia, or chronic infections. This test is instrumental in evaluating blood loss, anemia severity, and the body's response to treatments for these conditions.				



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			Count				
	Item		Result	Range Ref.	Unit		
MCV	7		63.8	80.0~100.0	fl		
6	80	100	The Mean Corpuscular Volume (MCV) test, an essential component of a complete blood count, measures the average size of red blood cells. High I values can indicate pernicious anemia, folic acid deficiency, or liver disease while low MCV is associated with conditions like iron deficiency anemia, thalassemia, or lead poisoning. MCV values also assist in guiding medicat and chemotherapy decisions, making it a valuable tool in clinical practice.				
MCH			18.5	26.0~34.0	pg		
1	26	34	The Mean Corpuscular Hemoglobin (MCH) test evaluates the average am of hemoglobin per red blood cell, crucial for assessing overall health and hematologic disorders. Elevated MCH levels can suggest conditions like pernicious anemia, folic acid deficiency, or liver disease. In contrast, low values are often indicative of iron deficiency anemia or thalassemia.				
MCH	НС		29.0	30.0~36.0	g/dl		
	30	36	The Mean Corpuscular Hemoglobin Concentration (MCHC) test measures t average concentration of hemoglobin in a given volume of red blood cells at is vital for assessing various hematologic conditions. High MCHC values ca indicate hereditary spherocytosis, whereas low MCHC is commonly seen in conditions like iron deficiency anemia and thalassemia.				
Plate	let		271	150~450	10e3/UL		
	150	450	disorders, thrombocytor Elevated platelet levels leukemia, myelodysplas low levels are seen in sp and aplastic anemia. It's purpura and petechiae, a transfusions and steroid	penia, leukemia, and can indicate conditions sia, chronic infection plenomegaly, purput crucial for evaluate and for assessing the s. However, inaccu	nosing and monitoring bleeding d the effects of chemotherapy. ions like polycythemia vera, chronic ns, and tuberculosis. Conversely, ra, autoimmune diseases, infections, ing bleeding symptoms, such as e efficacy of treatments like platelet racies can arise from clumping, nented cells, leading to false counts.		
Neut	ro		54.1	39~74	0/0		
	54.1 39	74	to Lymphocyte Ratio (Ninfection. High neutroph	NLR), is a key biom hil counts often ind	ificant in calculating the Neutrophil arker for detecting inflammation and icate bacterial infections or tissue ociated with viral infections or liver		
Lym	ophocytes		31.5	19~48	%		
	31.5	48	The Lymphocyte count is integral for assessing immune response, especially when analyzing the Neutrophil to Lymphocyte Ratio (NLR). Elevated lymphocyte levels are typically seen in viral infections, healing tuberculosis, rubella, mumps, pertussis, and lymphoblastic leukemia. Conversely, a low lymphocyte ratio can indicate a weakened immune response.				



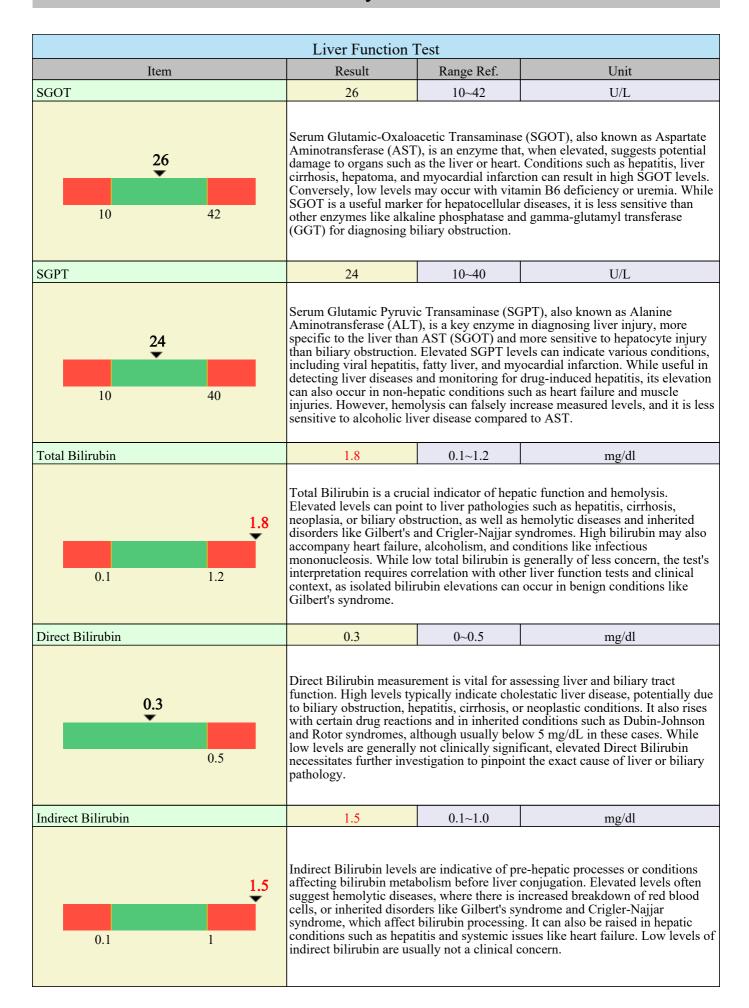
Complete Blood Count						
Item	Result	Range Ref.	Unit			
Monocytes	4.8	2~10	%			
2 10	The Monocyte count test is crucial for identifying various infectious and inflammatory conditions. Elevated monocyte levels can be indicative of acut tuberculosis, protozoal infections, subacute bacterial endocarditis, and monocytosis, and are often seen during the resolution phase of infections. Conversely, a low monocyte ratio may suggest a compromised immune response.					
Eosinophils	9.3	0~7	%			
7	The Eosinophil count test is key for diagnosing and monitoring allergic reactions, asthma, parasitic infections, and certain hematologic disorders. Elevated eosinophil levels are commonly associated with allergies, parasitic infestations, tuberculosis, brucellosis, collagen diseases, Hodgkin disease, myeloproliferative diseases, and acute hypereosinophilic syndrome. They can also increase in conditions like angioneurotic edema, dermatitis, and Addison' disease. Conversely, reduced eosinophil counts may indicate Cushing's syndrome, cortisone therapy, hormone-secreting tumors, and acute or chronic inflammation.					
Basophils	0.3	0~1.5	%			
0.3	Basophil count, an important component of a complete blood count, is essentia for diagnosing and monitoring allergic reactions and certain hematologic conditions. Elevated basophil levels are typically seen in cases of allergies, cachexia, and chronic granulocytic leukemia, indicating an active immune response or a myeloproliferative disorder. A low basophil ratio, on the other hand, might be less clinically significant but could still reflect variations in immune status.					

Coagulation Profile						
Ite	em	Result	Range Ref.	Unit		
PT		10.8	9.4~12.5	Sec		
9.4	12.5	coagulation system, part II, V, VII, X, and fibring severe liver disease, def deficiency. It is widely to However, its sensitivity results can be affected be anticoagulants like hirus	icularly in detecting on the high PT valuriciency in certain coused for monitoring to minor deficiencity heparin, lupus and argatroban, icoagulation level.	for evaluating the extrinsic g deficiencies in coagulation factors es may indicate a bleeding tendency, oagulation factors, or vitamin K warfarin anticoagulant therapy. es in single factors is limited. PT ticoagulants, and antithrombin potentially leading to inaccuracies In such cases, a chromogenic factor monitoring.		



Coagulation Profile							
Item		Result	Range Ref.	Unit			
APTT		33.0	28.0~40.0	Sec			
28	40	measure of the intrinsic anticoagulants, and defi- to conditions such as co- anticoagulants, while lo- sensitive to intrinsic pat prothrombin, and fibring heparin bioavailability a	and common pathweiencies in coagulation factor defaw levels are less clibway deficiencies, agen. It's complicated response, with le of heparin anti-Xa	e (aPTT) test is an important vays of coagulation, indicating use of tion factors. Elevated aPTT can point iciencies, liver disease, and use of nically significant. Although aPTT is less so for factor X, V, ed by numerous conditions affecting upus anticoagulants extending a assay for more accurate monitoring			

Biochemistry Examination





	Rochester Clinic	Name : DEN	MO-005 ID:	DEMO-005	Date of Exam : 2024-05-19		
			Liver Function 7	Γest			
	Item		Result	Range Ref.	Unit		
Tota	l Protein		6.6	6.0~8.5	g/dl		
	6.6	8.5	investigating causes of chyperproteinemia, or co suggest chronic liver dis infection. While helpful diagnostic clarity is ofte serum protein electrophi	edema. Elevated lev nditions like multip sease, nephrotic syn , the total protein le en achieved through oresis or immunodi	ng nutritional status and rels may indicate dehydration, rele myeloma, whereas low levels can drome, malnutrition, or chronic rel alone lacks specificity; further analyzing protein fractions via ffusion to assess individual proteins re detailed insights into the		
Albı	ımin		3.8	3.5~5.3	g/dl		
	3.8	5.3	oncotic blood pressure a can be a sign of dehydra indicative of chronic liv infections. It's instrumer edema, where levels bel acute phase reactant, all	and evaluating nutri- ation or hyperprotei- er disease, nephroti- ntal in assessing con- ow 2.0-2.5 g/dL ca- bumin decreases with	clays a key role in maintaining tional status. High albumin levels nemia, while low levels are often c syndrome, malnutrition, or chronic nditions causing proteinuria and n be significant. As a "negative" th acute inflammation, and its low nd prolonged hospital stays.		
Glol	oulin		2.8	2.0~3.6	g/dl		
	2.8	3.6	Globulin levels are indicative of a variety of bodily functions and pathologic with high levels often associated with conditions such as dehydration, multimyeloma, chronic infections, or liver cirrhosis. Low globulin levels can sugmalnutrition, immunodeficiency, or renal diseases where proteins are lost. Globulins include various groups like immunoglobulins and acute phase reactants, hence, specific globulin fractions often need to be examined for a more detailed understanding of the underlying condition.				
ALK	ζ-P		49	34~120 Child >300	U/L		
	49 34	120	bone diseases. Elevated conditions (such as hepa hyperparathyroidism. Lo significant concern. How	levels can indicate atitis and tumors), b ow ALK-P levels as wever, interpreting	enzyme in diagnosing liver and biliary tract obstruction, liver one diseases, and re less common and typically not of ALK-P results can be challenging em from multiple sources.		
γ-G.	T.		14	M:<73;F:<38	U/L		
	14 •	72.9	biliary diseases. Elevate hepatitis, fatty liver, par obstruction, making it p levels are generally not influenced by medicatio increase in lymphoma with normal γ-GT does cancer evaluations, γ-G'	ed levels are indicate acreatitis, drug-induanticularly sensitive a concern, γ-GT's usons like acetaminophythout hepatic involute completely exclus a can yield normal sence of tumors, he	key enzyme in diagnosing liver and live of conditions like alcoholic ced hepatitis, and biliary to biliary tract issues. While low tility has limitations. It can be hen and may not significantly lvement. High alkaline phosphatase de liver disease. Additionally, in results in progressive disease or ence it should be interpreted al findings.		



	Diabetes Screen	ing			
Item	Result	Range Ref.	Unit		
Glucose AC	104	70~100	mg/dl		
70 100	mellitus and evaluating indicate diabetes, chron levels may suggest insulypoadrenocorticism, or diagnosing hypoglycem conditions like dehydrat influenced by various fa	carbohydrate metalic pancreatitis, or vilinoma, liver diseas rentral nervous sy ia, evaluating acido tion and coma. How actors, including die eful interpretation in	g is crucial for diagnosing diabetes polism disorders. Elevated levels can itamin B1 deficiency, while low es, hypopituitarism, stem disorders. This test is key in sis and ketoacidosis, and assessing vever, blood glucose levels can be st, medication, and physiological in the context of clinical symptoms		
HbA1C	6.2	4.0~6.0	% of Hb		
4 6	Hemoglobin A1c (HbA1c) testing is pivotal for evaluating long-term glycemic control in patients with diabetes, diagnosing diabetes, and identifying individuals at risk for prediabetes. High HbA1c levels indicate poor blood glucose control over the past 3 months, while lower levels suggest better glycemic control. However, HbA1c should be interpreted alongside other diagnostic information and clinical evaluations, as it's not a substitute for daily blood glucose monitoring. Results can be affected by conditions that shorten erythrocyte lifespan, such as hemolytic anemia, sickle cell trait, pregnancy, or chronic blood loss, potentially leading to falsely low HbA1c values.				
AC Insulin	8.2	3.0~25.0	mU/L		
3 25	production, reflecting be in distinguishing betwee insulin in patients with a electrochemiluminescen specific for human insul react with several insuli	eta cell function in t en the body's own in diabetes. This test is at immunoassay on lin. However, it's cr n analogs used in di ending on whether	g a patient's endogenous insuling the pancreas. It is particularly useful usulin production and injected as performed using a 2-site the Roche platform and is highly usual to note that this assay does not inabetes treatment. Therefore, its the patient is receiving exogenous		



	Lipid Disorder Scro	eening			
Item	Result	Range Ref.	Unit		
Triglyceride	128	<150	mg/dl		
128	Triglyceride testing is essential in evaluating lipid metabolism and identifyin risk factors for atherosclerotic disease. Elevated levels may indicate hyperlipidemia, alcoholism, biliary tract obstruction, diabetes mellitus, pancreatitis, arteriosclerosis, hypothyroidism, nephrotic syndromes, or genet hyperlipoproteinemias. It's crucial for diagnosing chylomicronemia and in calculating LDL cholesterol, though this calculation becomes unreliable whe triglycerides exceed 800 mg/dL. Factors like estrogen therapy, pregnancy, ar certain medications like thiazide diuretics and β-adrenergic blockers can also increase triglyceride levels.				
Total Cholesterol	227	≤200	mg/dl		
227	disorders. Elevated chol syndrome, obstructive ja be influenced by endocr levels could signify mal disease, or an inherited hypothyroidism, hypertl impact cholesterol level	esterol levels may in aundice, diabetes may include disorders, liver nutrition, trauma, call LDL or HDL deficing roidism, severe liss. Despite some conhincreased risk of a	id status and identifying metabolic ndicate hyperlipidemia, nephrotic ellitus, or arteriosclerosis, and can or renal disease. Low cholesterol ancer, infection, digestive system ency. Hormonal imbalances, ver disease, and pregnancy also ntroversy, high cholesterol is atherosclerosis, coronary artery		
HDL-Cholesterol	44	≥40	mg/dl		
44	cardiovascular health as with regular exercise, is atherosclerotic disease r particularly when coupl of obesity, diabetes mel HDL-Cholesterol is ther cardiovascular health, w	sessment. Elevated protective against of isk. Conversely, loved with high triglycelitus, ischemic heartefore important in with therapeutic strat	L-Cholesterol) is crucial for HDL-Cholesterol, often associated coronary heart disease and reduces w HDL-Cholesterol levels, erides, significantly increase the risk t disease, and stroke. Monitoring evaluating and managing tegies increasingly focusing on cardiovascular disease risk.		
LDL-Cholesterol	150	<130	mg/dl		
150	assessing coronary hear conditions like hypothyl hyperlipoproteinemia, a indicate malnutrition, tragastrointestinal disease. nonfasting patients or we calculations like the Frievalues may be less diagnover may be less diagnover guidelines recomassessment, but patient of	t disease (CHD) rist roidism, nephrotic s re associated with in auma, surgery, cance Direct LDL measuraben fasting triglyce edewald formula manostic in liver disord mend LDL as the pelassification should dering potential into	L-Cholesterol) is a key factor in k. Elevated levels, often seen in syndrome, diabetes mellitus, and nereased CHD risk. Low levels can ser, infection, or hepatobiliary rement is particularly useful in rides exceed 400 mg/dL, where ay be inaccurate. However, LDL ders due to altered lipid metabolism. rimary index for CHD risk debased on serum or serum-erferences and specific conditions		

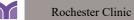


Lipid Disorder Screening								
Item	Result	Range Ref.	Unit					
T-Chol/HDL-Chol	5.2	1~5.0						
1 5	Chol) ratio is an importadisease (CAD). A high seen in hyperlipidemia, ratio is particularly usef atherosclerosis or hyper are considered at 'prema complicated in patients lipoprotein abnormalities.	ant indicator in evaluatio suggests a high while a low ratio is ful in assessing individuality and especially ature risk. However with obstructive lives. Also, it's important	oprotein Cholesterol (T-Chol/HDL-luating the risk of coronary artery her risk of CAD and is commonly considered more favorable. This viduals with a family history of ty those under 40 years of age, who r, its interpretation can be er disease, which may lead to ant to note that LDL cholesterol the levels exceed 800 mg/dL.					

Item	Result	Range Ref.	Unit		
Homocysteine	10.8	3.7-13.9	umol/L		
3.7 13.9	Homocysteine testing is an important tool for evaluating the risk of heart disease and stroke. Elevated homocysteine levels can indicate a higher risk of acute myocardial infarction and are often associated with deficiencies in vitamins B6, B12, and folic acid. Therefore, this test is useful in screening patients potentially at risk for cardiovascular events. However, it's important to note that while homocysteine levels are influenced by vitamin status, the test is not designed to diagnose deficiencies in folate or vitamin B12.				
HS-CRP	0.007	< 0.500	mg/dl		
0.007	assessing the risk of car HS-CRP levels are indical necrosis, infection, or aco other markers in cardiov and can reflect a variety	diovascular and per cative of acute myo- cute inflammation. Vascular risk assessi- of disease processe- ical history, taking	RP) testing is a valuable tool in ipheral vascular diseases. Elevated cardial infarction, ischemic tissue While HS-CRP can complement ment, its increases are nonspecific es. Interpretation of HS-CRP levels into account any recent tissue injury, ate CRP levels.		



	Renal Function	Γest	
Item	Result	Range Ref.	Unit
BUN	14.5	8.0~23.0	mg/dl
8 23	useful in diagnosing ren congestive heart failure, BUN levels can signify renal failure, decreased failure, dehydration, and monitoring hemodialysi alone is not fully reliable conditions like prerenal	al insufficiency, fai dehydration, and e chronic renal diseas renal perfusion, uring I gastrointestinal blues and therapy for see; it's best evaluated and postrenal azote	rucial indicator of renal health, lure, and other conditions like ffects of certain drugs. Elevated ses like glomerulonephritis, acute nary tract obstructions, severe heart eeding. It is particularly effective in evere azotemia. However, BUN d alongside creatinine levels. In emia, BUN increases more than acidosis can affect its levels.
Creatinin	1.01	0.50~1.30	mg/dl
1.01	diagnosing conditions li various muscle diseases lateral sclerosis, dermate trauma, and even in case	ke uremia, renal fai . Elevated creatinin omyositis, myasther es of starvation. Cre e stimulated by fact	kidney function, useful in lure, urinary tract obstruction, and e levels can indicate amyotrophic nia gravis, muscular dystrophies, eatine synthesis, and thus serum ors such as methyltestosterone use, postpartum period.



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Serology and Immunology Examination

Viral Hepatitis Screening							
Item	Result	Range Ref.	Unit				
Anti-HAV IgG	12.70(+)	<1.00	S/CO				
12.70(+) S/CO	A virus (HAV), either d antibodies indicates pre- conferring lifelong imm	ue to vaccination or vious exposure to H unity and protection	sing immunity against the hepatitis r past infection. Presence of these IAV or successful vaccination, n against reinfection. The absence of f prior exposure or vaccination				
HBsAg	<0.10(-) <1.00, Negative Index						
<0.10(-) Index	chronic hepatitis B virus prevent perinatal transm HBV infection, either ac out hepatitis B, especial no longer be detectable	s (HBV) infection a hission. The presence cute or chronic. How ly during the "core but anti-HBs antibo sts are usually posit	est is critical for diagnosing acute or nd screening pregnant women to see of HBsAg indicates an active wever, a negative result doesn't rule window" phase, where HBsAg may odies haven't developed yet. In this ive, with anti-HBc IgM being a				
Anti-HBs	>1000.0(+)	<8.0: No antibodies; ≥8.0, <12.0: Uncertain; ≥12.0: Presence of antibodies	mIU/mL				
>1000.0(+) mIU/mL	The Anti-Hepatitis B surface antibodies (Anti-HBs) test is crucial for assessing immunity against the Hepatitis B virus (HBV), either following infection or vaccination. The presence of Anti-HBs indicates immune response to HBV, and its levels are used to determine the need for vaccination or the success of vaccination in achieving protective immunity. However, the presence of Anti-HBs doesn't completely rule out active hepatitis B infection or guarantee protection against all HBV subtypes, as rare cases of concurrent HBsAg and Anti-HBs have been reported. Additionally, false-positive results can occur in individuals who have received blood transfusions or plasma components, complicating the interpretation in such cases.						
Anti-HCV	0.13(-)	<0.8 : Negative >1.0 : Positive 0.8~1.0 : Inconclusive	Index				
0.13(-) Index	The Anti-Hepatitis C Virus (Anti-HCV) test is instrumental in diagnosing HCV infection. A positive result indicates past or present infection with the hepatitis C virus. It's a crucial aid in the clinical diagnosis of viral hepatitis C. However, this test is not approved for screening blood or plasma donors and its accuracy may be limited in specific populations. Its performance characteristics have not been established for immunocompromised or immunosuppressed patients, in cord blood samples, or in patients under the age of 2 years, which may affect the reliability of results in these groups.						



	Thyroid Function	Test			
Item	Result Range Ref. Unit				
TSH	0.02 0.550~4.780 uIU/ml				
0.02	function test, used to dif TSH levels typically inc suggest hyperthyroidisn evaluating thyroid repla hyperthyroid patients. H like glucocorticoids, do	ferentiate between licate primary hypo n. It's useful in inve- cement therapy, and lowever, its accurace pamine, severe illne	test is a fundamental thyroid various thyroid conditions. High thyroidism, whereas low levels stigating low thyroxine (T4) results, d monitoring post-treatment by can be compromised by factors sesses, certain medications like othyroidism where TSH is not		
Free T4	1.98	0.89~1.76	ng/dl		
1.98 0.89 1.76	especially useful in eval issues with thyroxine-bi subjects with altered TE in nonthyroidal diseases However, Free T4 level	uating hyperthyroic nding globulin (TB 3G levels but euthyr and familial dysall s can be influenced olol, amiodarone, h	for thyroid function assessment, lism, hypothyroidism, and when G) are suspected. It's reliable in oid status and should remain normal buminemic hyperthyroxinemia. by medications like radiologic eparin, and carbamazepine. Elevated ansient.		



Urinalysis

	Urine Screenir	ng			
Item	Result	Range Ref.	Unit		
Appearance	Yellow Clear	light~yellow clear			
Yellow Clear	and managing renal disc diseases, and adjacent in valuable insights into a affected by various factor metabolites from medical reactions, high vitamin of	eases, urinary tract in flammatory or neo patient's overall headers: insufficient urinations like Pyridium C intake may skew e blood cells in the	for detecting urinary abnormalities infections, neoplasms, systemic plastic conditions. It provides alth. However, its accuracy can be ne volume may limit testing, n® can interfere with dipstick results for glucose or nitrite tests, sample can be compromised by low tion.		
Urine pH	6.5	5.0~8.0			
5 8	tract infections, diabetes excessive consumption On the other hand, a lov	s, nephrotic syndrom of coffee, tea, and we wer urine pH may b	and managing conditions like urinary me, and dietary influences like regetables, which can increase pH. e observed in conditions like r in individuals with a diet high in		
Urine Sp.G	1.020	1.005~1.030			
1.02	Urine Specific Gravity (Sp.G) testing is essential for evaluating the concentration of urine and is indicative of hydration status and renal function. High specific gravity can point towards conditions like dehydration, reduce urine output, or diabetes, suggesting a more concentrated urine. Conversely low specific gravity may be seen in diabetes insipidus or in the syndrome of inappropriate antidiuretic hormone secretion (SIADH), indicating diluted un				
Urine Glucose	-	-			
- +	often used as an initial i The presence of glucose levels, pointing towards important to note that un	ndicator for conditi in urine typically s possible glucose mrine glucose testing	ifying glucose excretion in urine, ons like prediabetes and diabetes. suggests elevated blood glucose netabolism disorders. However, it's is not as sensitive or specific as ed as the sole diagnostic tool.		
Urine Protein	-	-			
- +	renal insufficiency, diab disorders. The presence	etes, nephrotic syn of protein in urine owever, transient p	g proteinuria, which can indicate drome, or other kidney-related is a significant marker of kidney roteinuria can also occur due to		



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Urine Screening Item Result Range Ref. Unit Urine OB Urine Occult Blood (Urine OB) testing is essential for detecting hidden blood in urine, which can be indicative of conditions like urolithiasis, cystitis, autoimmune diseases, or tumors. The presence of occult blood in urine is a critical diagnostic marker for various urinary tract and systemic conditions. However, it's important to consider that this test can sometimes yield false positives due to factors like menstruation or certain foods and medications, + necessitating careful interpretation in conjunction with other clinical evaluations for accurate diagnosis. Urine UBG Normal Normal Urine Bilirubin + Urine NIT Urine KET Urine Ketone testing is a valuable diagnostic tool primarily used to identify ketosis, commonly seen in conditions like prolonged fasting or diabetic ketoacidosis (DKA). The presence of ketones in urine indicates that the body is using fats rather than carbohydrates for energy, a key sign of metabolic imbalance. While highly indicative of DKA in diabetic patients, it's essential to interpret results in the context of clinical symptoms and other diagnostic tests + for a comprehensive assessment. Urine Leu + **RBC** 2-4 0~5 /HPF Urine Sediment analysis, specifically Red Blood Cells (RBCs), is crucial for diagnosing urinary tract conditions like urolithiasis, cystitis, autoimmune 2-4 /HPF diseases, and tumors. The presence of RBCs in urine sediment can indicate inflammation, infection, or trauma within the urinary tract.



	Urine Screening	ng				
Item	Result Range Ref. Unit					
WBC	0-1	0~5	/HPF			
0-1 /HPF	Urine White Blood Cell (WBC) testing is instrumental in detecting urinary tracinfections (UTIs) and microbial infections. Elevated levels of WBCs in urine typically point to inflammation or infection within the urinary system.					
Epith.cell	0-1	0~5	/HPF			
0-1 /HPF	Urine Epithelial Cell analysis is significant for detecting renal tubular damage and identifying contamination, such as from vaginal discharge. Elevated epithelial cells in urine may suggest underlying renal issues or contamination during sample collection.					
Cast	None found	None found	/HPF			
None found /HPF	and nephrotic syndrome	The presence of cor cellular element	renal pathologies like pyelonephritis asts—cylindrical structures formed s—indicates renal tubular damage or			
Crystals	None found	None found	/HPF			
Bacteria	None found	None found	/HPF			
None found /HPF	Urine Bacteria testing is essential for diagnosing urinary tract infections (UTIs) and other microbial infections. The presence of bacteria in urine is a key indicator of infection within the urinary system. While this test is a critical tool for identifying UTIs, it's important to interpret results alongside clinical symptoms and additional tests, as contamination can occur during sample collection. Accurate diagnosis and treatment rely on correlating these results with the patient's overall health status and symptoms.					
Other	None found	None found	/HPF			

Abdominal Ultrasound

Abdominal ultrasound findings:

Liver:

The liver parenchyma is normal echogenicity and the liver size is within normal limit. There is no tumor in both lobe of liver.

Gallbladder:

Not remarkable change

Common bile duct:

No dilatation

Pancreas:

The pancreas is not remarkable change and partially obscured by intestinal gas.

Spleen:

Normal size.

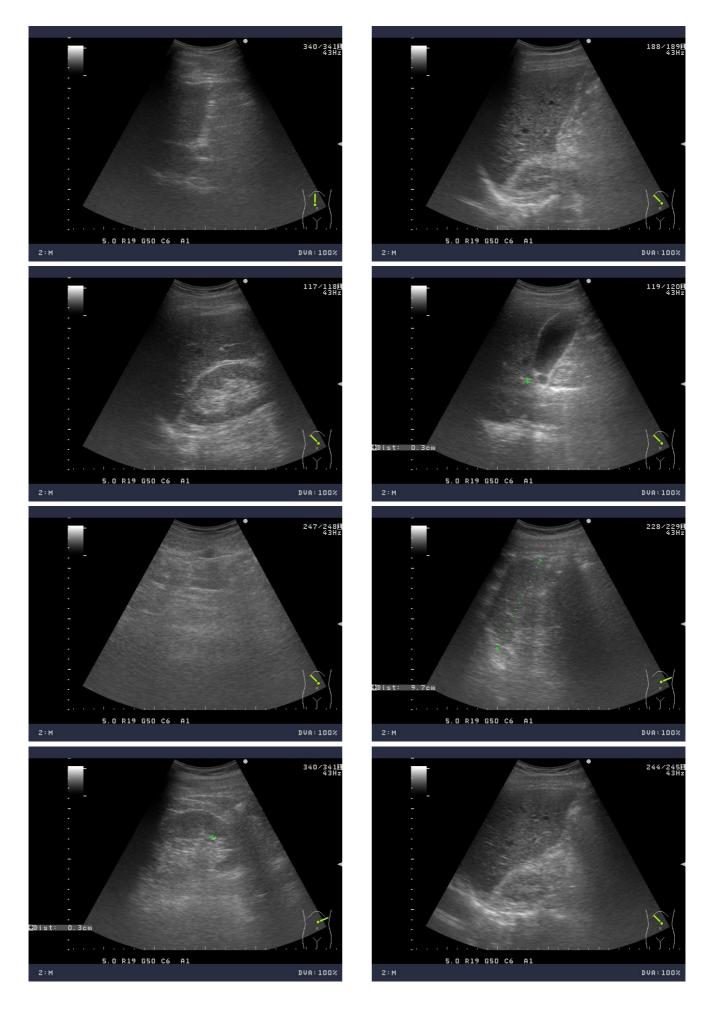
Kidneys:

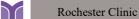
There is a 0.3cm calcification spot in left kidney.

Diagnosis:

Left renal calcification spot







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Electrocardiogram

Pulmonary Function:

No Abnormality

Blood Oxygen Saturation:

No Abnormality

Resting ECG:

No Abnormality

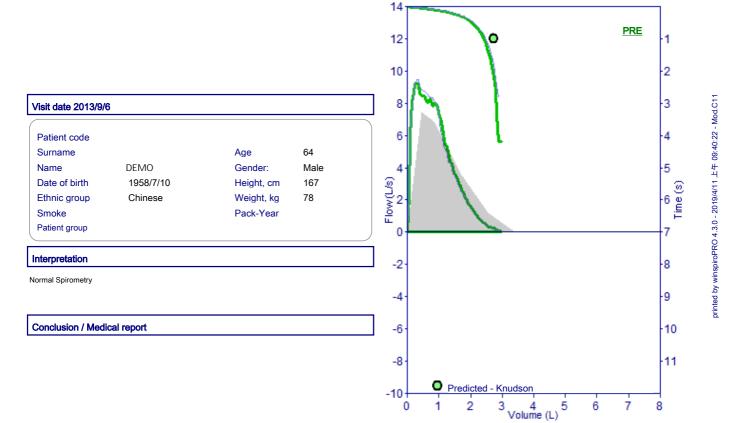
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Pulmonary Function Test Results

Flow / Volume and Volume / Time Loops



1					
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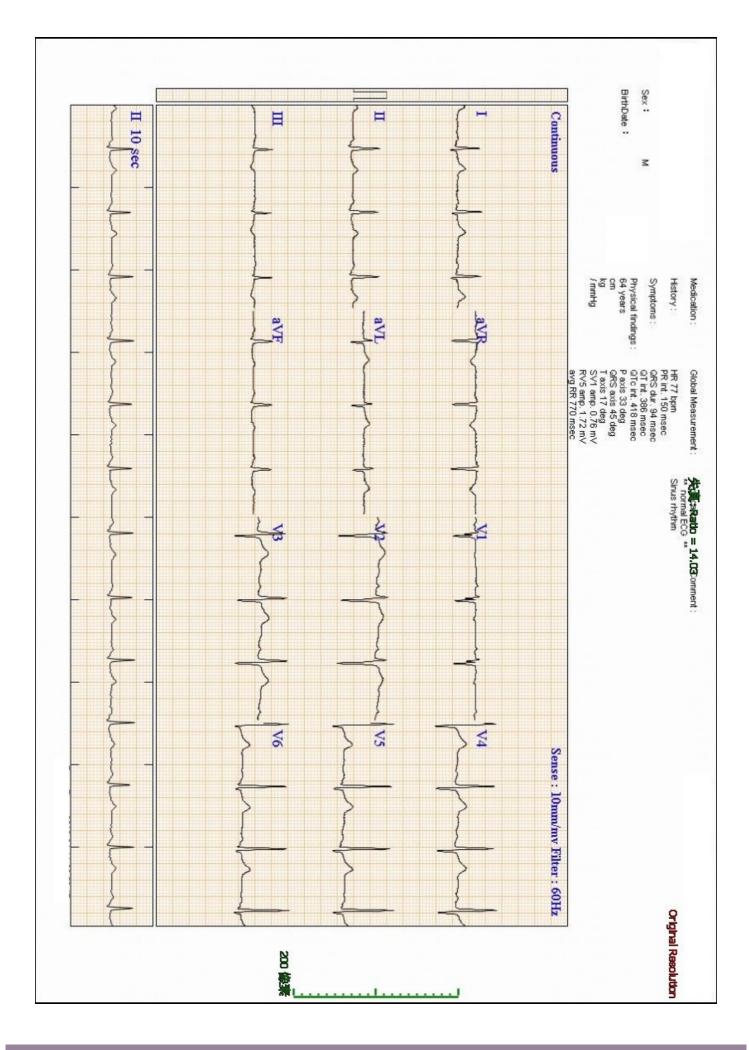
PRE Trial date 202	24/5/19 上午 09:38:25									
Parameters	BTPS 1.078 28°C - 82.4°F	Pred	PRE	%Pred	POST	%Pred	%Chg	PRE#1	PRE#2	PRE#3
Best values from all le	oops									
FVC	L	3.41	2.99	88				2.99	2.96	
FEV1	L	2.72	2.49	91				2.46	2.49	
FEV1/FVC	%	80.7	83.3	103				82.3	84.1	
PEF	L/s	7.47	9.60	129				9.32	9.60	
Values from best loop	0					'		•		
FEF2575	L/s	2.83	2.80	99				2.80	2.87	
FEF25	L/s	6.84	8.21	120				8.21	8.36	
FEF50	L/s	3.54	3.56	101				3.56	3.57	
FEF75	L/s	1.22	0.85	70				0.85	0.96	
FEV3	L	3.29	2.89	88				2.89	2.90	
FET	S	6.00	4.19	70				4.19	3.63	
FIVC	L	3.41								
FIV1	L	2.72								
FIV1/FIVC	%	80.7	0.0	0				0.0	0.0	
PIF	L/s	7.47								
ELA	Years	64	73					73	72	
VC	L								II. D	A
IVC	L							Quality Report Repeatable FVC, Repeatable		LA_
FEV1/VC	%								Repeatable FVC, Repeatable FEV1, Repeatable PEF	
ERV	L									
IC	L									
EVol	mL		0							

Signature

Instrument used
Spirolab III S/N 306499

MIR





10-year Coronary Heart Disease Risk Assessment

The '10 Year Coronary Heart Disease(CHD) Risk Assessment' is based on the American Heart Association's analysis of the Framingham Heart Study*, assessing the risk of CHD for patients who have no noticeable symptoms currently. The Framingham CHD Risk Score is generated by assessing the patient's age, gender, total cholesterol, high-density lipoprotein cholesterol, blood pressure, and whether there is a presence of diabetes and smoking habits. Through the Framingham CHD Risk Score, it can be estimated the likelihood of CHD occurrence within the next 10 years, and one's current health status age group.

Age	Gender	Cholesterol	HDL-Cholesterol	Blood Pressure	Diabetes	Smoking
64	Male	227 mg/dl	44 mg/dl	L:143/91 mmHg R:134/83 mmHg	No	No

Estimates risk for CHD over a period of 10 years 20%

The age of CHD risk equivalent is: 70-74

Peter W.F. Wilson, et al. Circulation 1998;97:1837-1847

Estimates the risk so	Estimates the risk score and risk of CHD occurrence within the next 10 years						
Risk Score	< 10 %	10 ~ 20 %	> 20 %				
Risk	Low	Moderate	High				



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Chest X-Ray Examination

- 1. Atherosclerosis of aortic arch
- 2. Thoracic spondylosis
- 3. No obvious active pulmonary lesion



