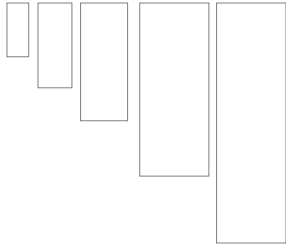




**LEISURE, INC.**



Leisure offers  
**DEMECAL®**

**A Health Management Platform That Supports Individuals To Manage Their Own Health**



Demecal service consists of an immediate blood separation system that anyone can use anytime, anywhere and a lifetime health management data service.

Health management approach should be in sync with an individual's lifestyle.

The most innovative feature of the service is a “health management program” that is based on an individual's chronological history of test results.

Leisure's goal is to be the “home doctor to 100 million people.”

# **Three Pillars of DEMECAL<sup>®</sup> Service**

- 1 Immediate blood separation device**
- 2 Capability to conduct blood analysis with ultra-small volume of blood**

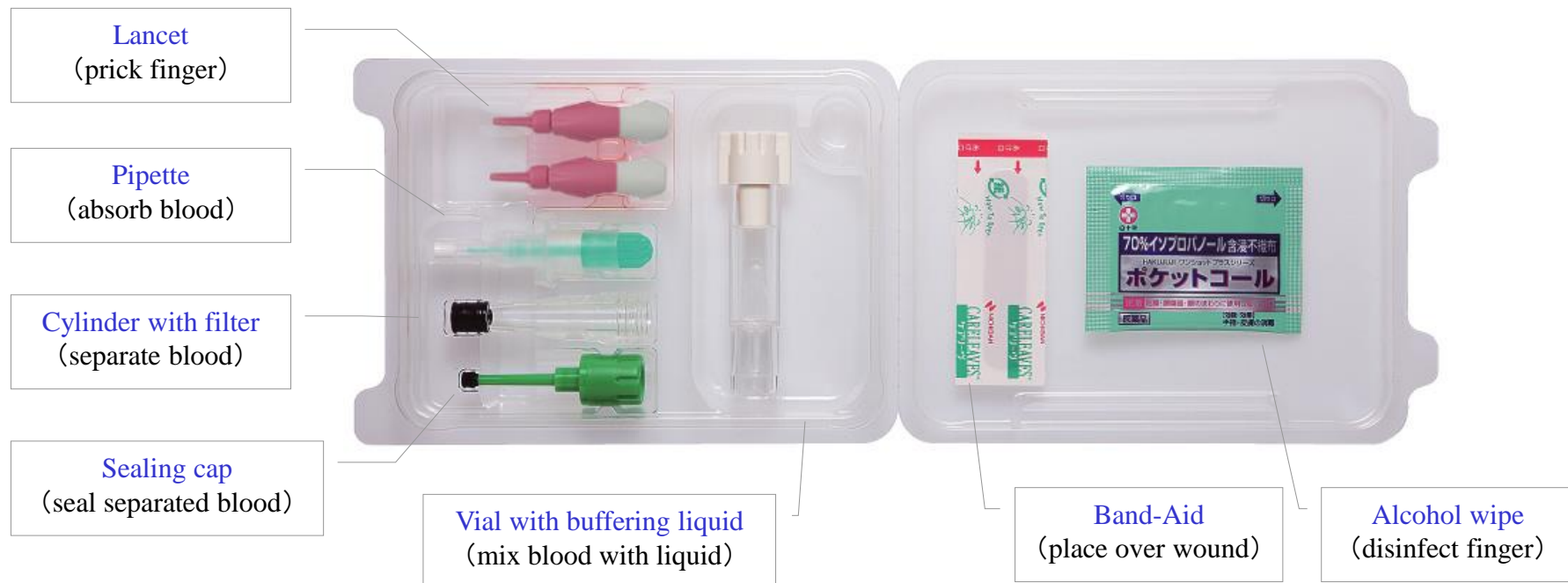
**Demecal Kit has been approved by the Ministry of Health, Labor and Welfare. It is the first combined medical device to be approved by the ministry.**

**DEMECAL®**

Approval Number

**22600BZX00362000**

(Combined medical device)



# DEMECAL®

DEMECAL kit is delivered directly to user



User collects blood anytime, anywhere



User sends the blood sample back to laboratory



Blood sample is measured and analyzed at laboratory



Blood test report is sent to user by post or email



Self-Medication

Disease prevention

Early treatment in hospital





DEMECAL<sup>®</sup>

**Features of DEMECAL SERVICE**



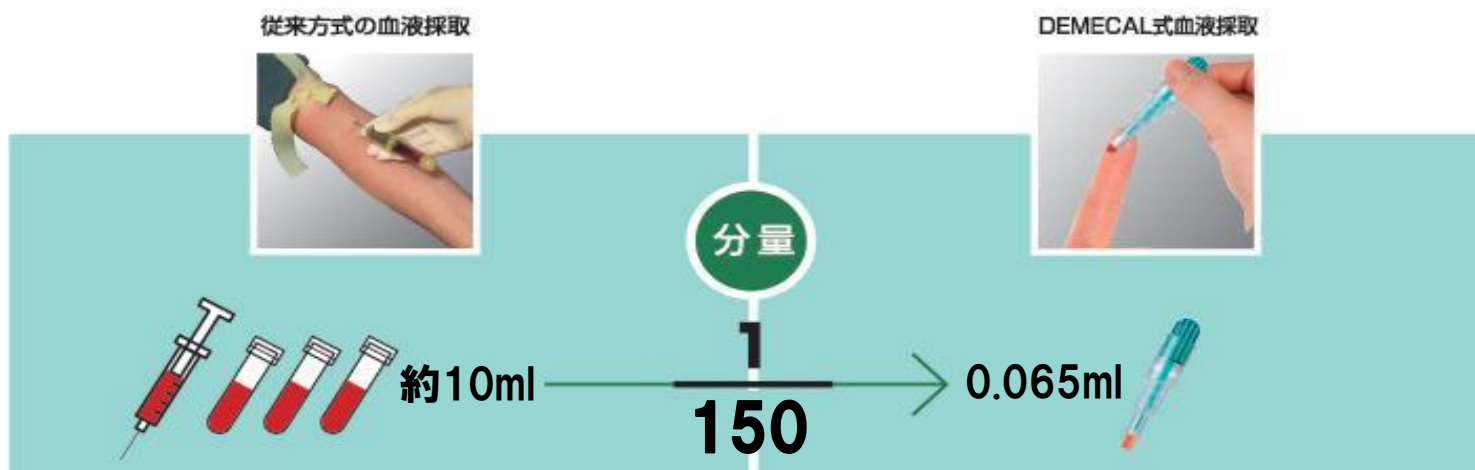
# Blood Test Requiring Ultra-small Volume of Blood

Today clinical blood tests are conducted in the following manner

- 1) Doctors, nurses or clinical laboratory technicians collect blood from patients
- 2) Blood is centrifuged to separate plasma
- 3) Serum is placed in a container
- 4) Serum is analyzed by a blood analysis equipment

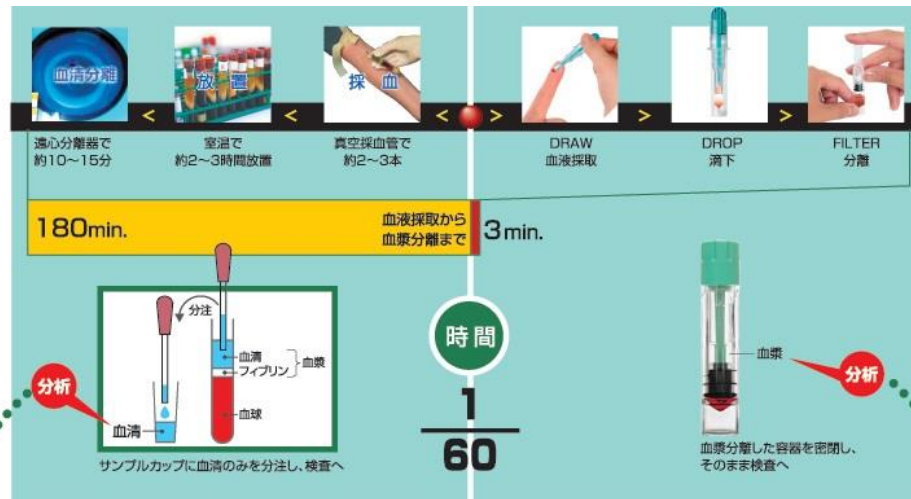
This method requires approximately three vacuum tubes (10 ml) of blood

With the Demecal kit, it is possible to separate the plasma by placing 3 to 4 drops of peripheral blood into a cylinder containing a dilution buffering solution and simply pressing a piston equipped with a special filter. This method is proprietary to Leisure, and is the only technology available worldwide that is capable of immediate plasma separation of ultra-small volume of blood at ambient temperature and pressure.





# Stability during Transportation and High-precision Analysis



Separating the plasma immediately after drawing blood using the immediate plasma separation device developed by Leisure allows the specimen to maintain its integrity during transportation.

Analysis is conducted by reliable analyzers utilized in conventional blood test centers.

Leisure's patented technologies that consist of immediate plasma separation device and ultra-small volume quantitative blood analyses are the foundation to ensure accuracy.





# CRMLN CERTIFICATION

**CHOLESTEROL REFERENCE METHOD LABORATORY NETWORK**

Certificate of Traceability

This certifies that

***LEISURE, INC.***  
***Tokyo, Japan***

has documented traceability to the **National Reference System for Cholesterol** by performing a direct comparison with the cholesterol reference method using fresh human specimens which cover the National Cholesterol Education Program medical decision points. This analytical system is representative of the manufacturer's product and has demonstrated the ability to meet the NCEP's performance criteria for accuracy and precision. The comparison shows that the performance of this analytical system is as follows:

Among-run % CV	Average % Bias	Total Error
<b>0.5%</b>	<b>1.7%</b>	<b>2.6%</b>

The comparison was performed with

**Osaka Medical Center for Health Science and Promotion**  
**Osaka, Japan**

The system evaluated was:

<b>Instrument:</b> <i><b>JEOL JCA-BM2250</b></i>	<b>Calibrator:</b> <i><b>Wako Multi Calibrator Lipids</b></i> <b>Lot#:</b> <i><b>KJ 110</b></i> <b>Set point:</b> <i><b>220 mg/dL</b></i>
<b>Cholesterol reagent:</b> <i><b>Wako T-CHO L H</b></i> <b>Lot #'s:</b> <i><b>R1: KJ978; R2: KM036</b></i>	<b>Matrix:</b> <i><b>Plasma</b></i>

**Date of evaluation:** February 18, 2005      **Date of expiration:** February 18, 2007

CRMLN Laboratory Director *Takashi Shimamoto*

The CDC (Centers for Disease Control and Prevention) is a federal agency under the Department of Health and Human Services in the USA that assumes a leading role in promoting health. It provides reliable information that contributes to decisions related to health and is a key player in developing activities targeted to disease prevention and health promotion.

As the effects of lipids on cardiovascular disease have become more evident, accuracy of lipid tests has become even more important. It is, therefore, imperative to standardize lipid measurement. The CRMLN (Cholesterol Reference Method Laboratory Network) an international organization set up by the guidance of the CDC has continuously undertaken such standardization. The CRMLN is a network centered around the CDC which was requested by the WHO to standardize measurement of lipids. The CRMLN has standardized laboratories located in 10 facilities across 8 countries and is accepted as the model for international collaboration for clinical testing.

The CRMLN issued certificate is proof of accuracy assurance for manufacturers of reagents and laboratories. Test results using reagents by such manufacturers and laboratories are deemed to be highly reliable. Demecal's measurement of lipids using Leisure's immediate plasma separation technology and ultra-small volume blood analysis method was the first to meet international standards using ultra-small volume of blood,



## Laboratory Dedicated to Demecal

**Demecal's tests are conducted at a dedicated laboratory located in Yamanashi Prefecture called "The Demecal Healthcare Research Center" (DHRC).**

**DHRC is registered with the Yamanashi Prefecture as a clinical laboratory that meets the regulations established by the Health, Labor and Welfare Ministry (Registered Clinical Laboratory No.16). Furthermore, DHRC has received the highest possible grade by the Integrated Accuracy Assurance Committee of the Japanese Association of Medical Technologists that annually evaluates the facility's accuracy management.**

**DHRC has the capacity to handle three million specimens per annum.**



Management Company



**Eil Inc.,**

Demecal Healthcare Research Center  
855-24 Komatsu Kasugaicho Fuefuku-shi  
Yamanashi Japan

衛生検査所登録番号：板橋区第4号  
医療関連サービスマーク認定番号：E(7)0802130310  
医薬品販売許可番号：0319030029号  
高度管理医療機器販売業：4501190500022号  
アメリカ血液バンク協会（AABB）認証施設



**IMS Group**

ITABASHI MEDICAL SYSTEM

Eil, Inc. is the clinical laboratory arm of IMS Group that operates more than 70 hospitals and medical facilities in Northern Japan and the Kanto Area.



# Prompt and Easy to Understand Test Reports

- Test results are sent to the user's registered address in approximately seven business days after the user mails the blood specimen.
- If the user registers an email address, the user will receive an email with an url link to the test results in approximately four business days.



速報



シート



各種データ履歴一覧表

検査結果	2005
総蛋白(TP)	7.0
アルブミン(Alb)	4.0
GOT	17
GPT	12
γ-GTP	23
総コレステロール(TC)	170
中性脂肪(TG)	108
HDLコレステロール(HDL-C)	60
尿酸(UA)	5.0
尿素窒素(BUN)	10.6
クレアチニン(CRNN)	0.5
糖代謝 血糖(Gluc)	117
身長(cm)	166.0
体重(kg)	65.0
BMI	23.7
問診・その他	2005
アルコールを飲む習慣がある	いいえ
あなタバコを吸う	はい
運動をする習慣がない	いいえ
現在、通院治療中の病気がある	いいえ
最大血圧	0
最小血圧	0
検査依頼	未記入
肝臓病	未記入



DEMECAL

生活習慣チェック

項目	結果	コメント
1. 喫煙	喫煙	喫煙は健康に悪影響を及ぼす可能性があります。
2. 飲酒	飲酒	飲酒は健康に悪影響を及ぼす可能性があります。
3. 運動	運動不足	運動不足は健康に悪影響を及ぼす可能性があります。
4. 食事	食事	食事は健康に悪影響を及ぼす可能性があります。
5. 睡眠	睡眠	睡眠は健康に悪影響を及ぼす可能性があります。
6. ストレス	ストレス	ストレスは健康に悪影響を及ぼす可能性があります。
7. 血圧	血圧	血圧は健康に悪影響を及ぼす可能性があります。
8. 血糖	血糖	血糖は健康に悪影響を及ぼす可能性があります。
9. 脂質	脂質	脂質は健康に悪影響を及ぼす可能性があります。
10. その他	その他	その他は健康に悪影響を及ぼす可能性があります。



# **TEST CATEGORIES**

## Biochemistry

Total protein (TP)  
Albumin (ALB)  
Asparatateaminotransferase(AST)  
Alanineaminotransferase(ALT)  
 $\gamma$ -glutamyltranspeptidase( $\gamma$ -GTP)  
Total cholesterol (T-Cho)  
Triglyceride (TG)  
High density lipoprotein cholesterol (HDL-Cho)  
Low density lipoprotein cholesterol (LDL-Cho)  
Blood urea nitrogen (BUN)  
Creatinine (CRE)  
Uric acid (UA)  
Glucose (GLU)  
Glycosylatedhemoglobin A1c (HbA1c)

## Periodontology

Actinobacillusactinomycetemcomitans(A.a)  
Porphyromonasgingivalis(P.g)  
Prevotellaintermedia(P.i)  
Eikenellacorrodens(E.c)

## Tumor Marker

Carcinoembryonicantigen (CEA)  
 $\alpha$ -fetoprotein (AFP)  
Carbohydrate antigen 19-9 (CA19-9)  
Carbohydrate antigen 125 (CA125)  
Prostate-specific antigen (PSA)

## Immunology

Ferritin  
Helicobacter pylori antibody  
High sensitive C-reactive protein  
Anti-p53 antibody (anti-P53)  
Pepsinogen I / II

## Viral Immunology

Human immunodeficiency virus  
antibody (HIV)  
Hepatitis C virus antibody (HCV)  
Hepatitis B virus antibody (HBV)

## Other

Adiponectin



**PATENTS**

# JAPAN



**Ultra-Small Volume Blood Separation System  
(Plasma Separation Device)**

**Patent No.: 3597837**

**Title: BLOOD SEPARATING DEVICE AND BLOOD  
SEPARATING METHOD**

**Table-Top Automatic Analysis Machine**

**Patent No: 3445791**

**Title: METHOD, DEVICE, AND CARTRIDGE FOR  
BIOCHEMICAL ANALYSIS**

**Ultra-small volume test system**

**(Leisure Device Testing Procedure)**

**Patent No: 3698696**

**Title: BIOLOGICAL SAMPLE PREPARATION, QUANTIFICATION AND  
PRESERVATION METHOD**

# USA



**Patent No.: US6936473 B2**

**Title: METHOD OF PREPARING A BIOLOGICAL  
SAMPLE FOR QUANTIFICATION**

# EUROPE



**Patent No : EP1221614**

**Title: METHOD OF PREPARING BIOLOGICAL  
SAMPLE FOR QUANTIFICATION**

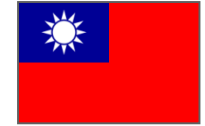
*KOREA*



**Patent No: 10-0566124**

**Title: APPARATUS FOR SEPARATING BIOLOGICAL  
SAMPLE  
METHOD OF THE SAME**

*Taiwan*



**Patent No: I 247615**

**Title: 分離生物樣品之裝置及分離生物樣品之方法**

*SINGAPORE*



**Patent No: 135926**

**特許名称: APPARATUS FOR SEPARATING BIOLOGICAL  
SAMPLE  
METHOD OF THE SAME**





# **Company Profile**

**Corporate Name :** Leisure, Inc.

**Established :** May 25, 2000

**Capital :** ¥881,862,750 (as of May 31, 2016)

**Business Purpose :** Analysis of Biological Samples and R&D  
R&D, Production and Distribution of Medical  
Instruments and Device  
Clinical Testing Service  
Production and Distribution of Medical and Health  
related Computer Systems  
Information Service on the Internet and  
Distribution of Information Service

**Address :** Head Office  
2-33-8 Nihombashi Ningyocho,  
Chuo-ku, Tokyo 103-0013  
**TEL : +81-3-5645-7371 FAX : +81-3-5645-7039**