

# *Bitmoji-tek*

L e a d i n g   t e c h n o l o g y   c r e a t e s   b e a u t y

# T3 AI Intelligent Scalp Analyzer

T3 AI Intelligent Scalp Analyzer is developed with the goal of solving scalp problems. It integrates ISP image processing technology and four-spectrum light-sensing imaging technology. By virtue of a high-definition lens and four types of light sources, combined with AI algorithms and image processing capabilities, it converts the microscopic conditions of the scalp into visual images and conducts analysis.

The product is designed with the original intention of professionally and objectively analyzing thirteen scalp problems while ensuring flexible operation. It can detect five key areas: the forehead, left and right sides, top of the head, and occipital area. It comprehensively evaluates hair follicle health, sebum secretion, inflammation, scalp barrier function, and potential hair loss risks, helping to fully grasp the real state of the scalp.





## Applicable scenarios



Beauty salon



Hair salon

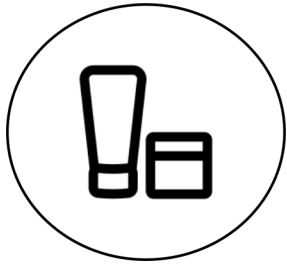


Hair transplant  
clinic

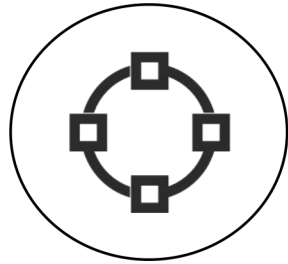


For household  
use

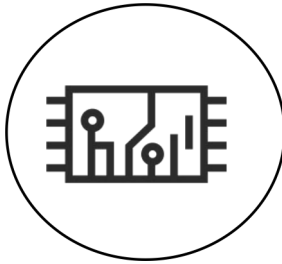
## Technical advantages



Product  
recommendation



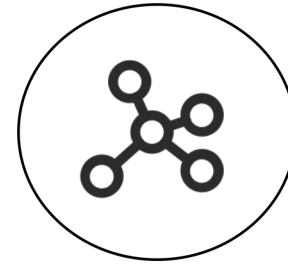
Four-spectral  
analysis



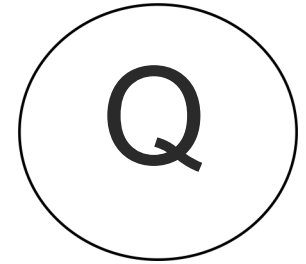
AI  
algorithm



Hair follicle  
detection



13 dimensional  
indicators



200x/50x  
magnification

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02

**Hardware  
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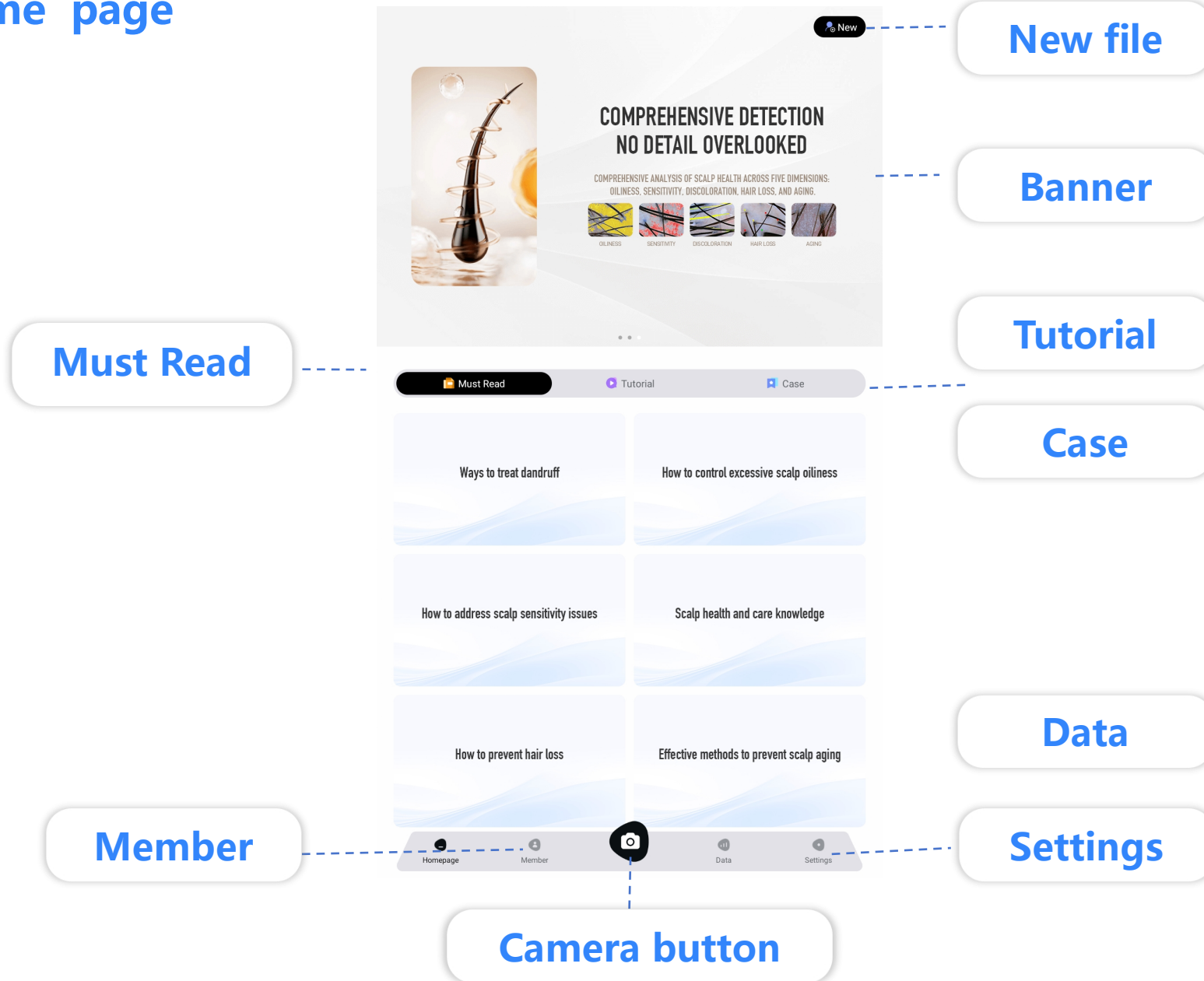
03

**4 spectrum  
image  
analysis**

04

**13 analysis  
detection  
indicators**

## APP Home page



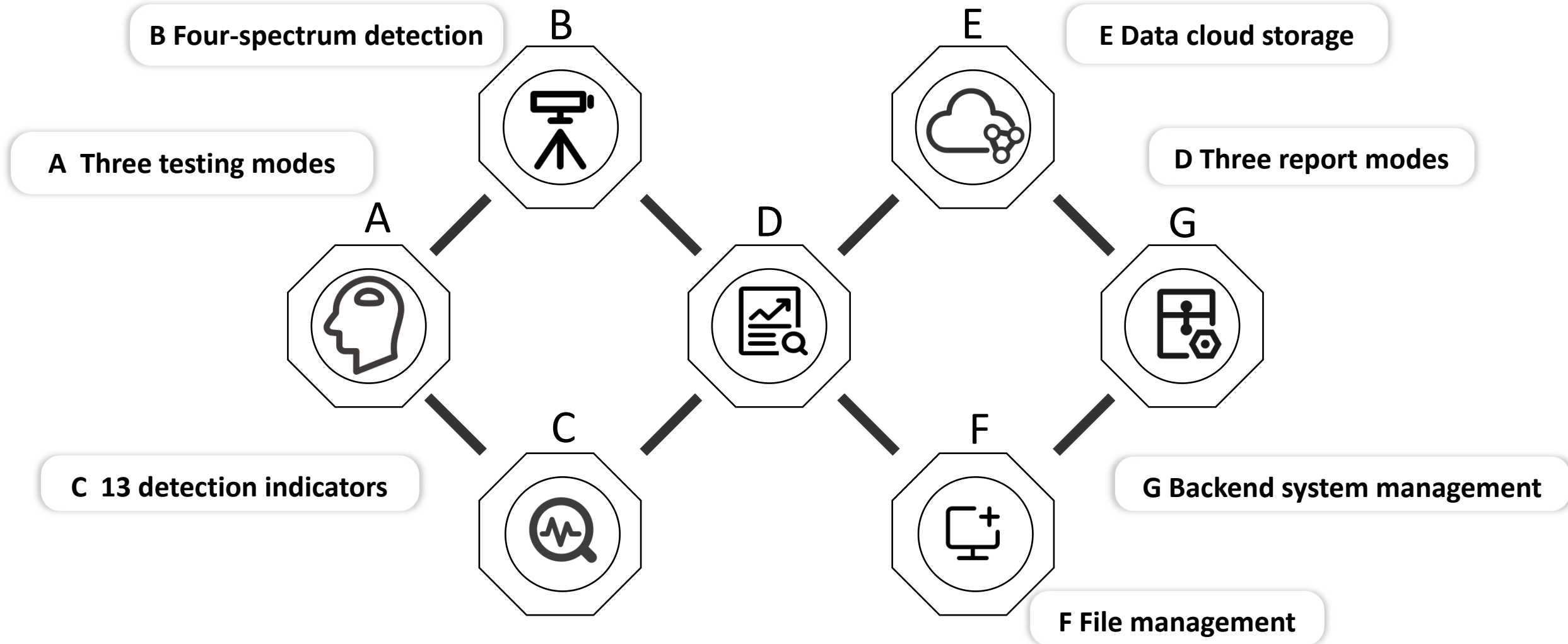


01

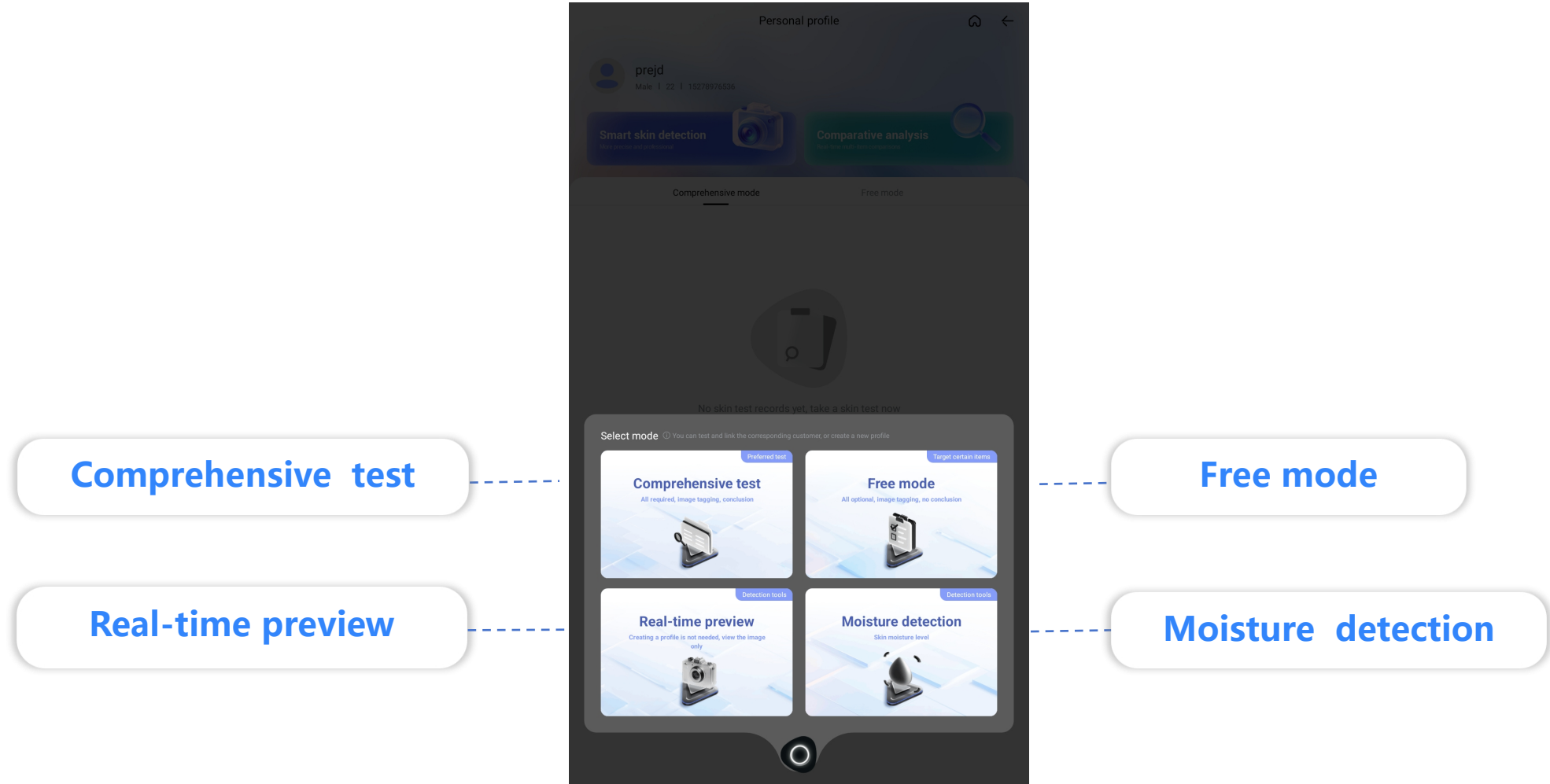
FUNCTIONS  
COVER

T3 AI Intelligent Scalp Analyzer

## Functional coverage

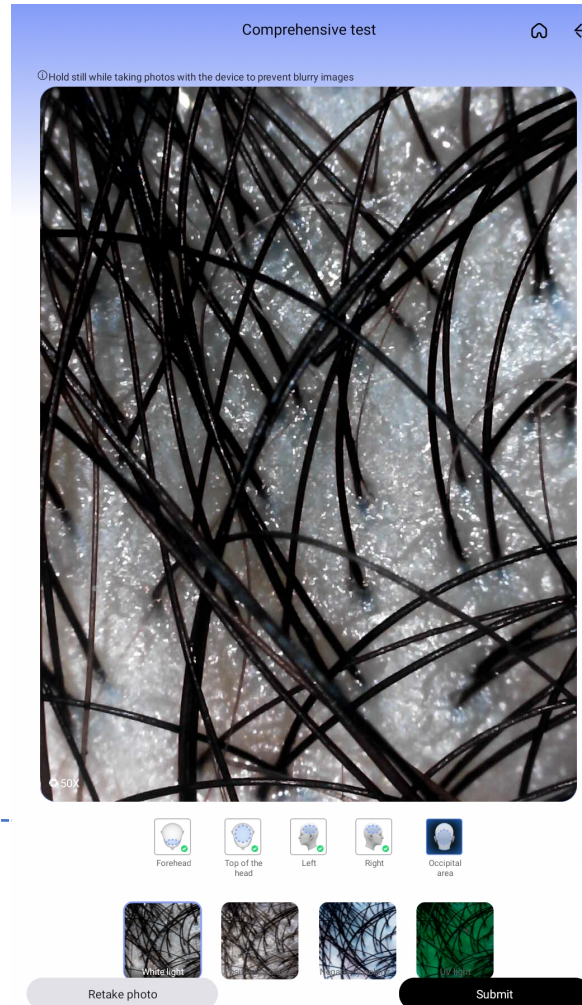


## Four detection modes



# Comprehensive test

Four-spectrum shooting:  
after all shots are completed,  
click "Confirm" to jump to  
the next part. After shooting,  
you can choose to retake or  
confirm.

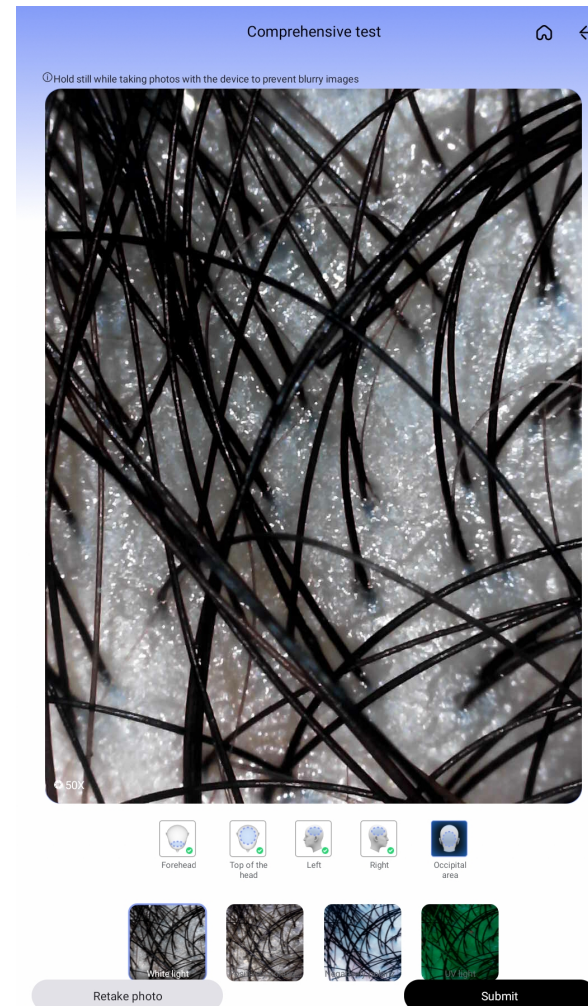


Take photos according to  
five parts. The detection  
parts are: forehead, top  
of the head, left , right,  
and occiput area.



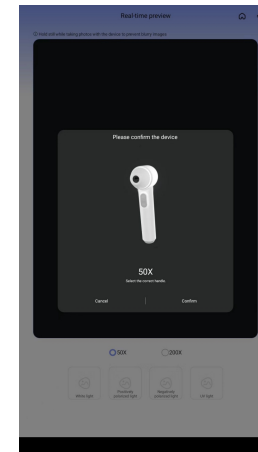
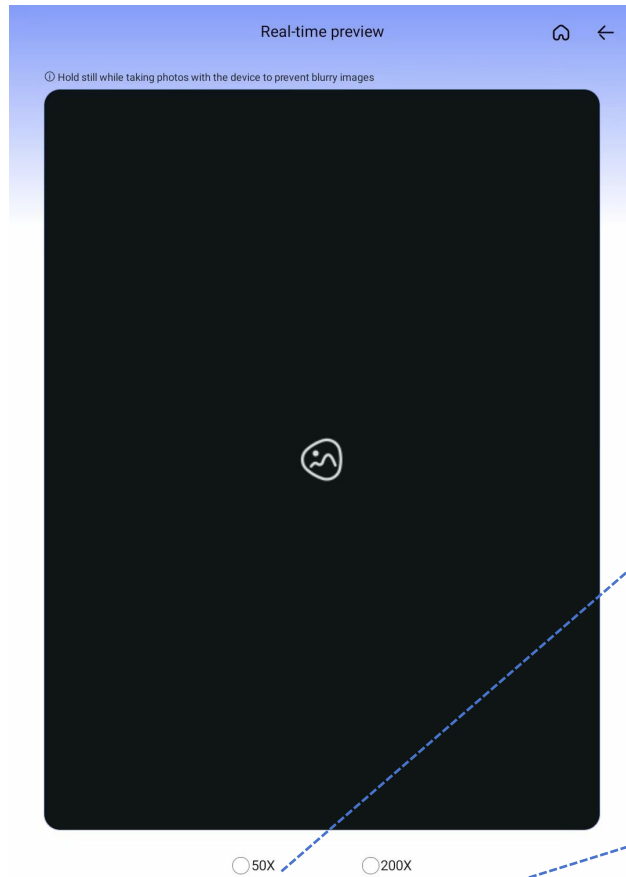
## Free mode

Four-spectrum shooting allows detection of any selected part. After taking the photo, you can choose to retake it or confirm it.



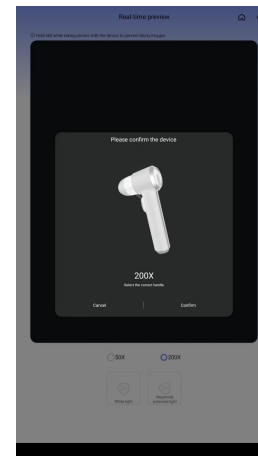
Detect based on any five parts of the scalp. The detection parts are: forehead, top of the head, left, right, and occiput area.

# Real-time preview



50X

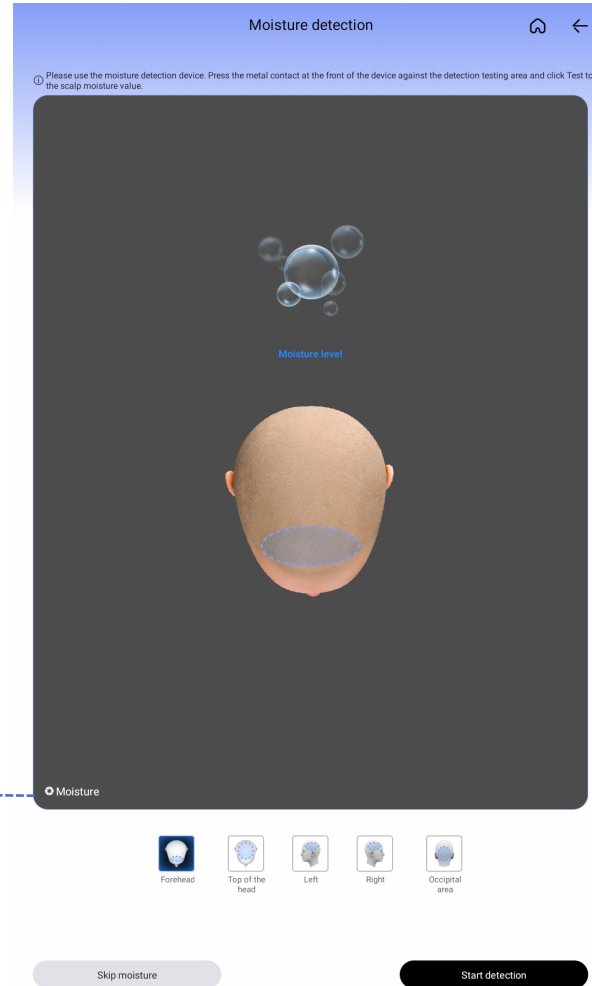
Immersive image viewing,  
no report. Handpieces can  
be selected for switching.



200X

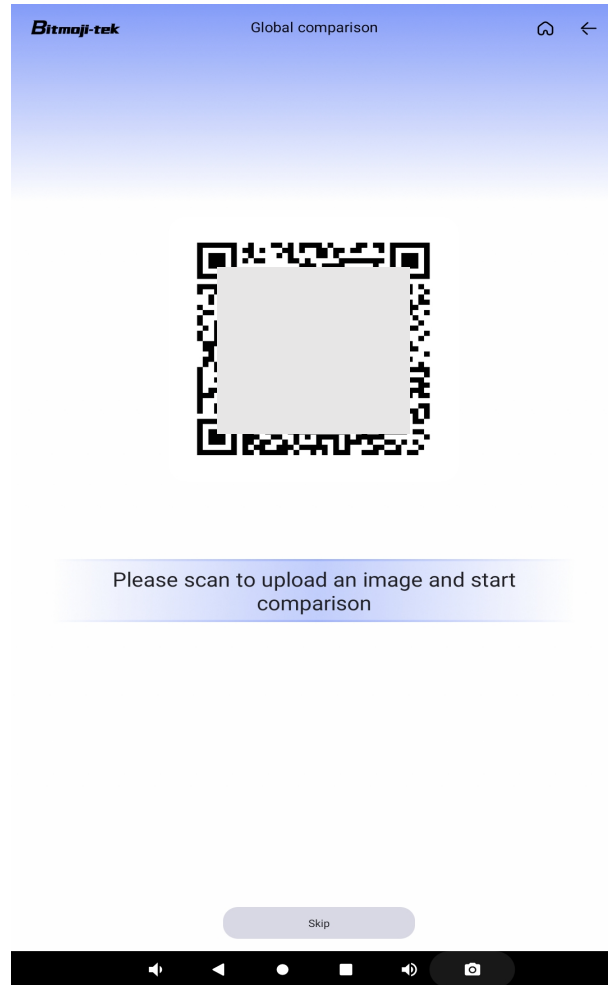
# Moisture detection

Moisture detection page: You can click to detect moisture and click "Confirm" after the detection is finished, or you can skip this detection item.

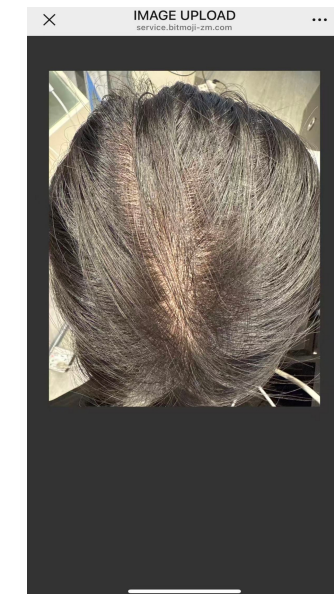


The detection parts are: forehead, top of the head, left, right, and occiput area.

# Global comparison



Scan the QR code with your mobile phone, upload the original photo of your scalp taken by your phone to display the actual condition of your scalp. After the treatment, you can view the effect through the global comparison function.



Upload to mobile phone

## Four-spectrum **detection**



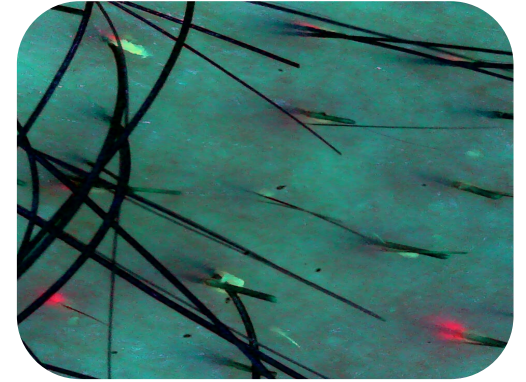
White light



Positive  
polarization light



Negative  
polarization light



UV light

# Thirteen detection indicators

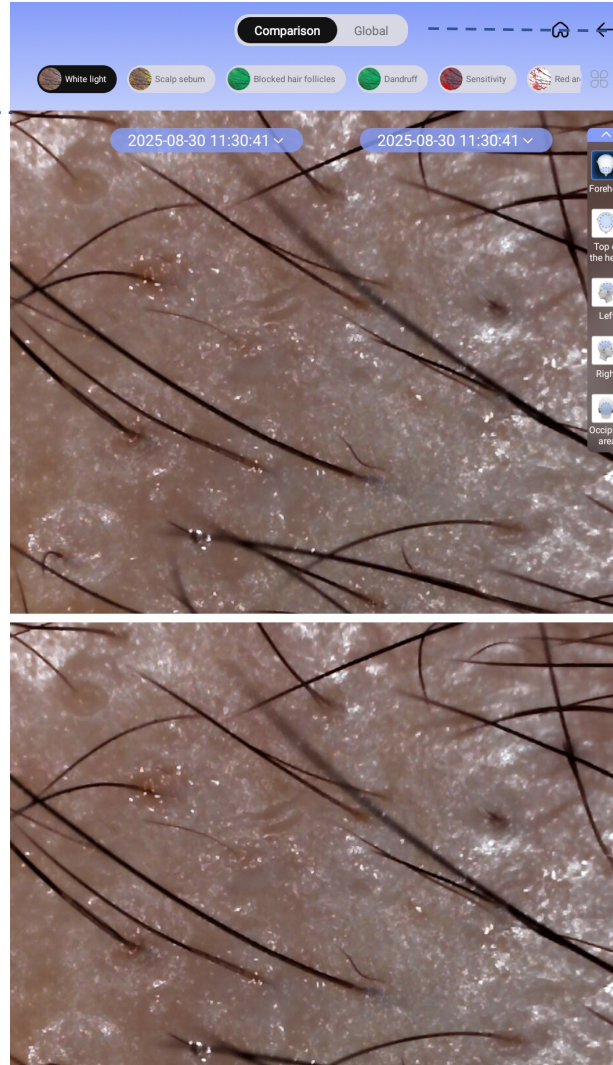




## Comparison mode

You can select any single indicator for comparison.

Different time points can be selected for comparison.



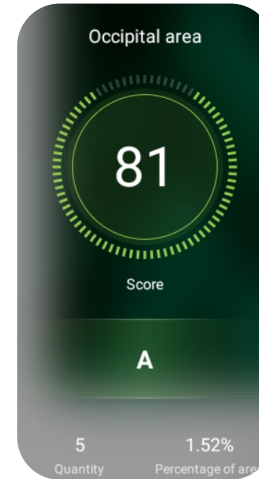
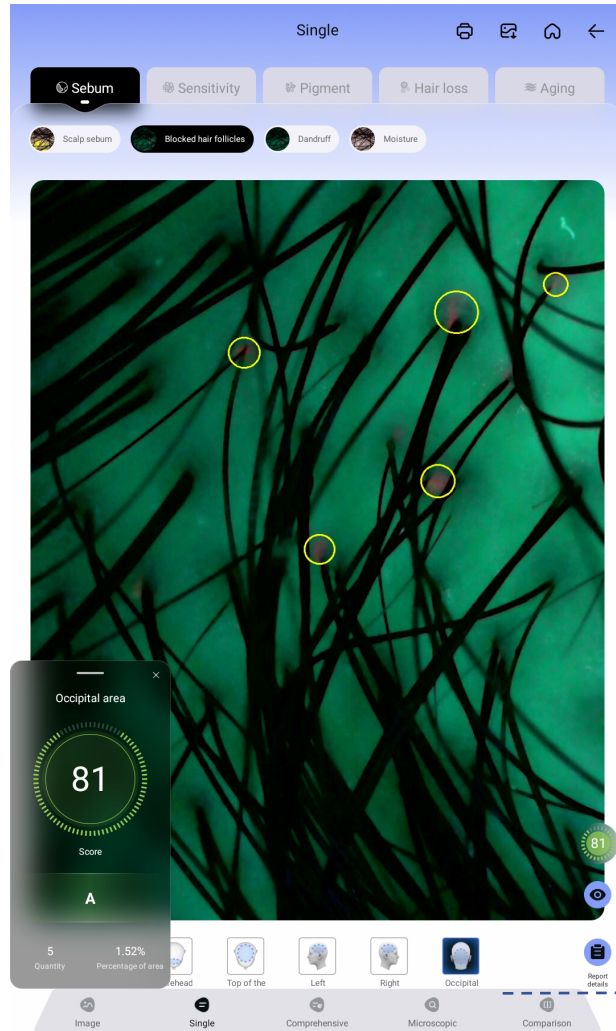
You can choose to compare locally or globally.

Different parts can be selected for comparison.



Global comparison

# Three Reporting Modes - Single Independent Report 1



Data analysis

- 1.Score
- 2.Level
- 3.Quantity
- 4.Area
- 5.Proportion

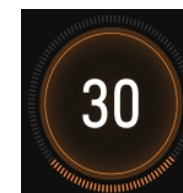
According to the scalp condition indicators, the five parts (forehead, top of the head, left side, right side, occiput area) are classified into 5 levels from high to low and marked with different colors:

A Green B Blue C Yellow D Orange E Red

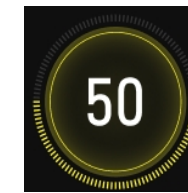
Five parts



E



D



C



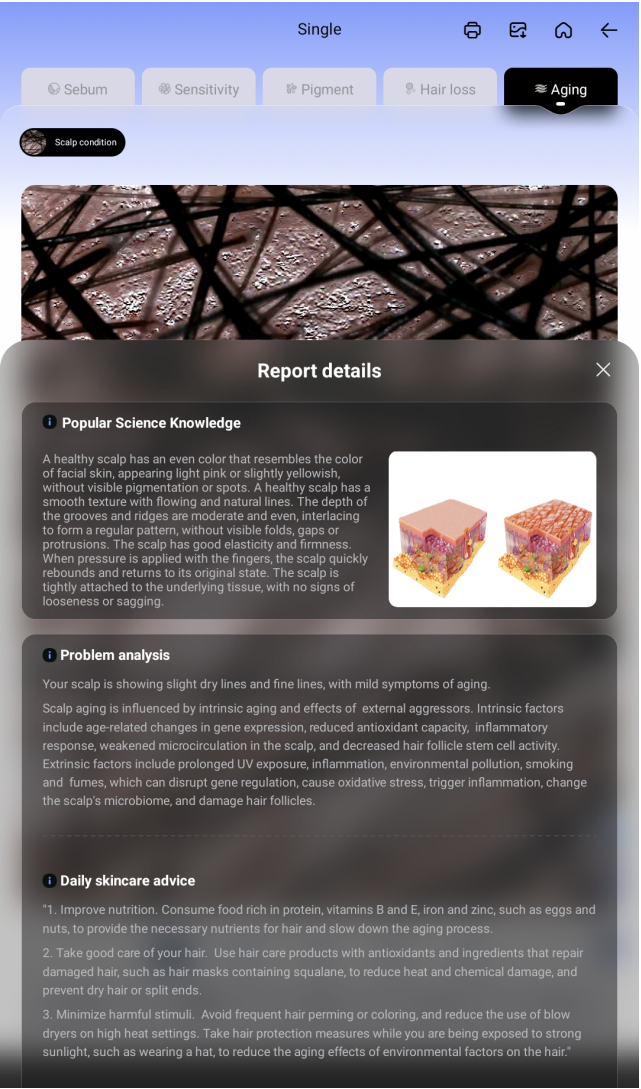
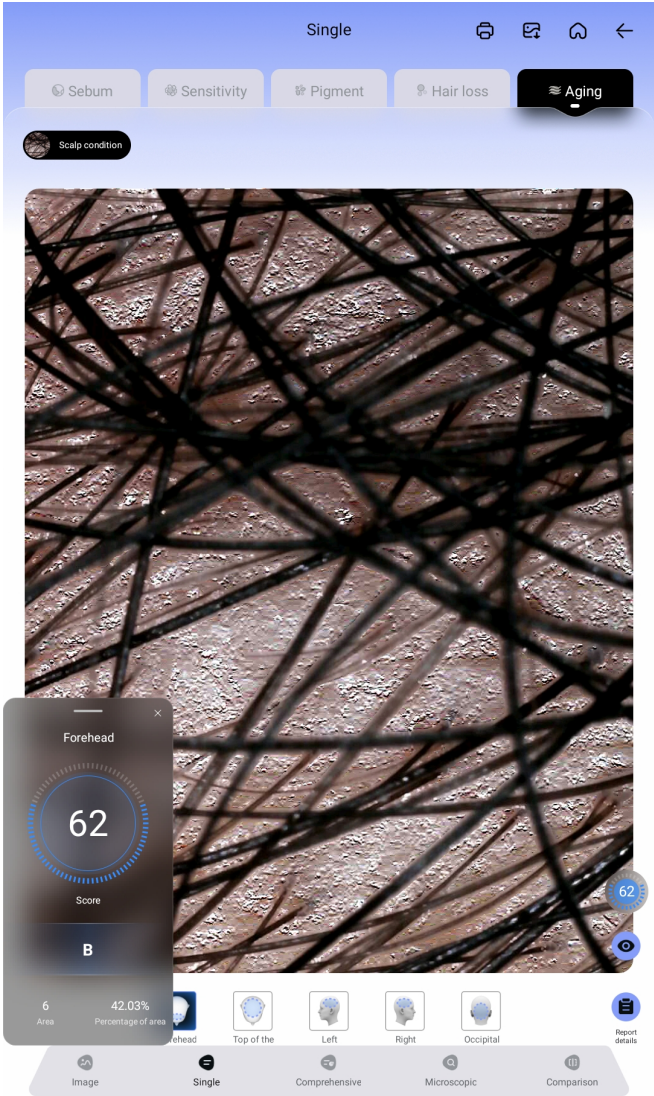
B



A

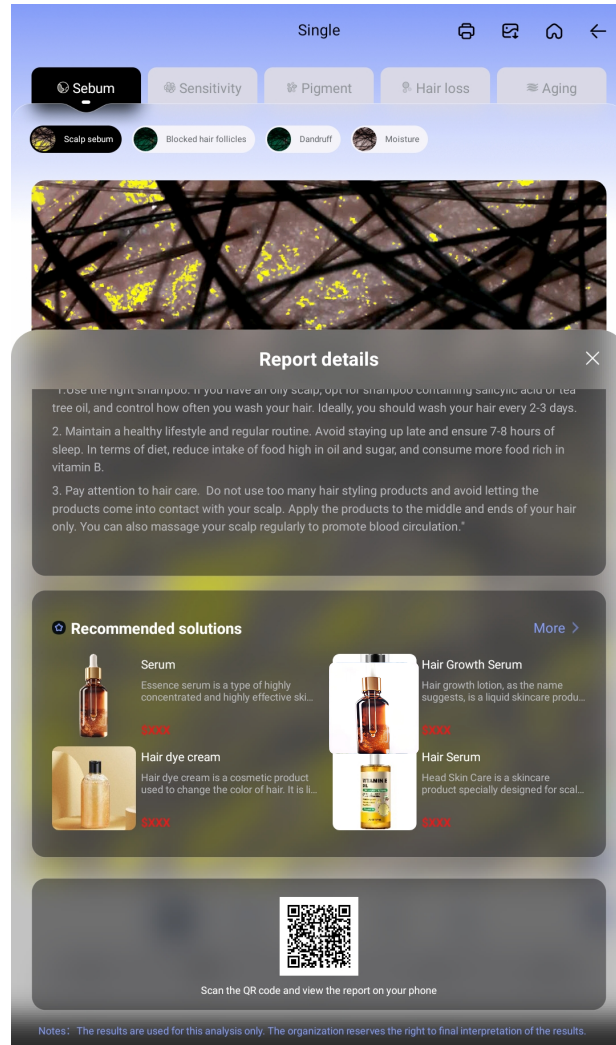


# Three Reporting Modes - Single Independent Report 1

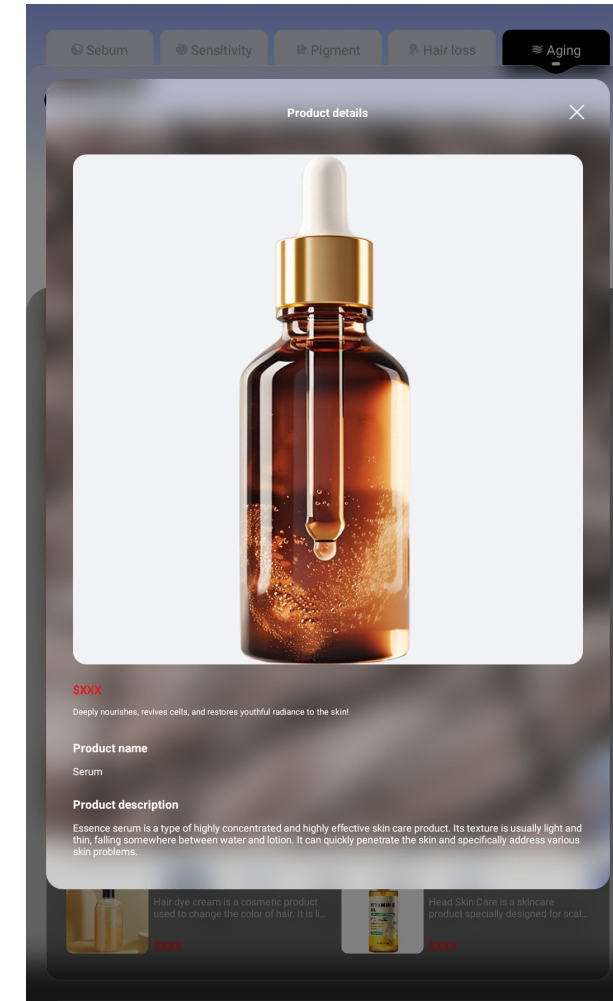


----- Report details

# Three Reporting Modes - Single Independent Report 1



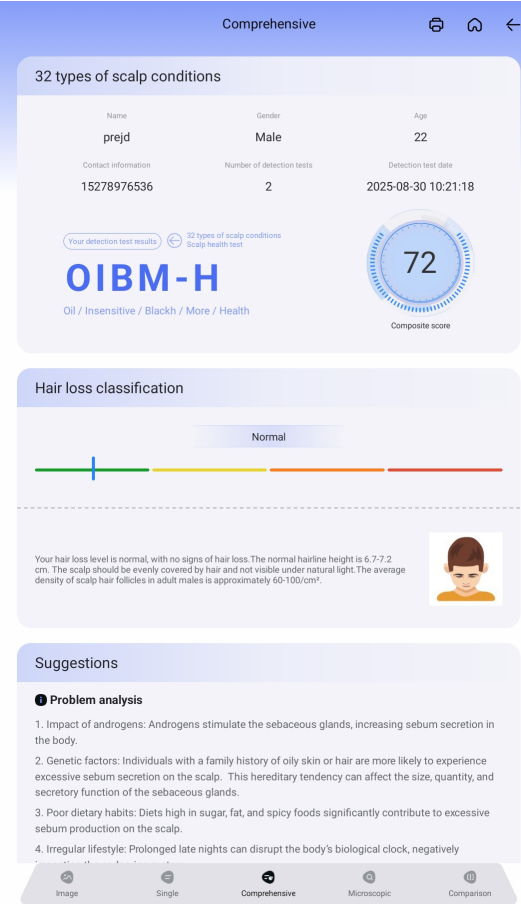
Product details page ----->



## Type 32 Scalp Classification

| 32 - type Scalp Classification |  |          |  |
|--------------------------------|--|----------|--|
| OSBL - D                       | Oily/Sensitive/Black hair/Hair loss - Aging          | OSBL - H | Oily/Sensitive/Black hair/Hair loss - Healthy          |
| OSBM - D                       | Oily/Sensitive/Black hair/No hair loss - Aging       | OSBM - H | Oily/Sensitive/Black hair/No hair loss - Healthy       |
| OSWL - D                       | Oily/Sensitive/White hair/Hair loss - Aging          | OSWL - H | Oily/Sensitive/White hair/Hair loss - Healthy          |
| OSWM - D                       | Oily/Sensitive/White hair/No hair loss - Aging       | OSWM - H | Oily/Sensitive/White hair/No hair loss - Healthy       |
| DSBL - D                       | Dry/Sensitive/Black hair/Hair loss - Aging           | DSBL - H | Dry/Sensitive/Black hair/Hair loss - Healthy           |
| DSBM - D                       | Dry/Sensitive/Black hair/No hair loss - Aging        | DSBM - H | Dry/Sensitive/Black hair/No hair loss - Healthy        |
| DSWL - D                       | Dry/Sensitive/White hair/Hair loss - Aging           | DSWL - H | Dry/Sensitive/White hair/Hair loss - Healthy           |
| DSWM - D                       | Dry/Sensitive/White hair/No hair loss - Aging        | DSWM - H | Dry/Sensitive/White hair/No hair loss - Healthy        |
| OIBL - D                       | Oily/Non - sensitive/Black hair/Hair loss - Aging    | OIBL - H | Oily/Non - sensitive/Black hair/Hair loss - Healthy    |
| OIBM - D                       | Oily/Non - sensitive/Black hair/No hair loss - Aging | OIBM - H | Oily/Non - sensitive/Black hair/No hair loss - Healthy |
| OIWL - D                       | Oily/Non - sensitive/White hair/Hair loss - Aging    | OIWL - H | Oily/Non - sensitive/White hair/Hair loss - Healthy    |
| OIWM - D                       | Oily/Non - sensitive/White hair/No hair loss - Aging | OIWM - H | Oily/Non - sensitive/White hair/No hair loss - Healthy |
| DIBL - D                       | Dry/Non - sensitive/Black hair/Hair loss - Aging     | DIBL - H | Dry/Non - sensitive/Black hair/Hair loss - Healthy     |
| DIBM - D                       | Dry/Non - sensitive/Black hair/No hair loss - Aging  | DIBM - H | Dry/Non - sensitive/Black hair/No hair loss - Healthy  |
| DIWL - D                       | Dry/Non - sensitive/White hair/Hair loss - Aging     | DIWL - H | Dry/Non - sensitive/White hair/Hair loss - Healthy     |
| DIWM - D                       | Dry/Non - sensitive/White hair/No hair loss - Aging  | DIWM - H | Dry/Non - sensitive/White hair/No hair loss - Healthy  |

# Three Reporting Modes - Comprehensive Analysis Report 2

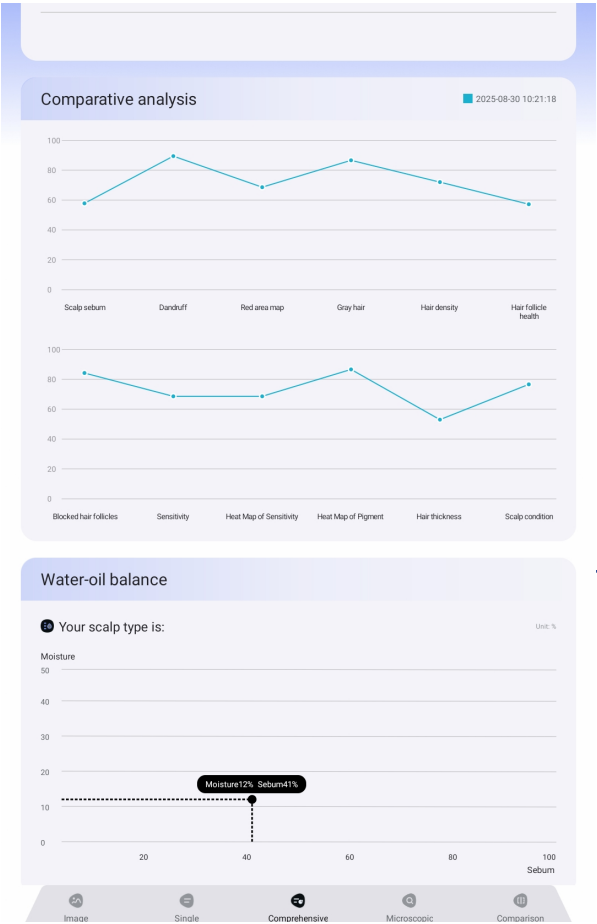


Personal information

32 types of scalp conditions

Hair loss classification

Suggestions

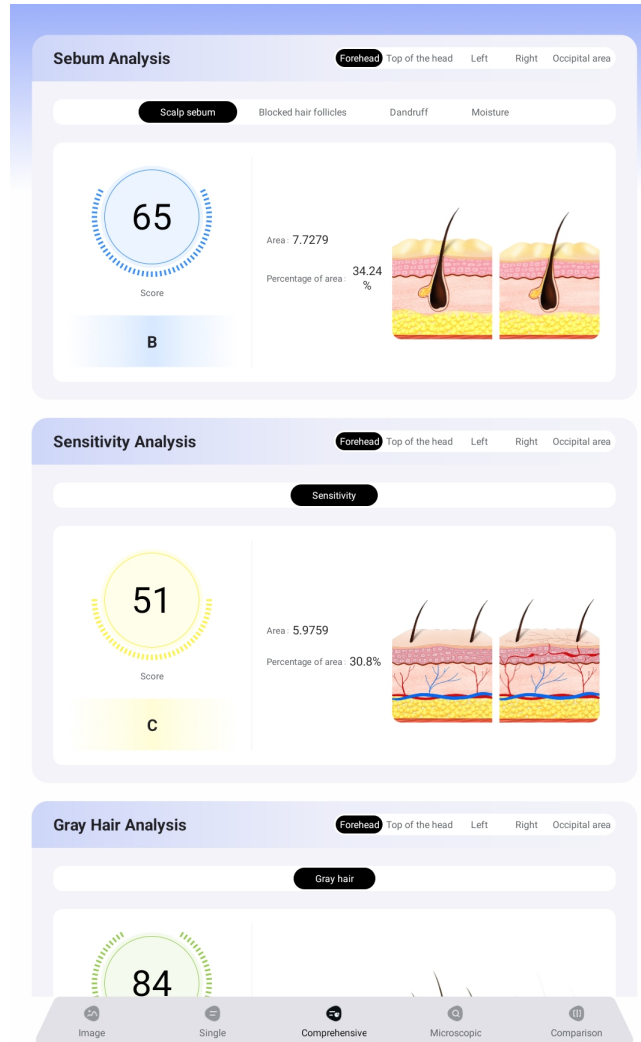


Comparative analysis

Scores of each individual test item

Water-oil balance

# Three Reporting Modes - Comprehensive Analysis Report 2



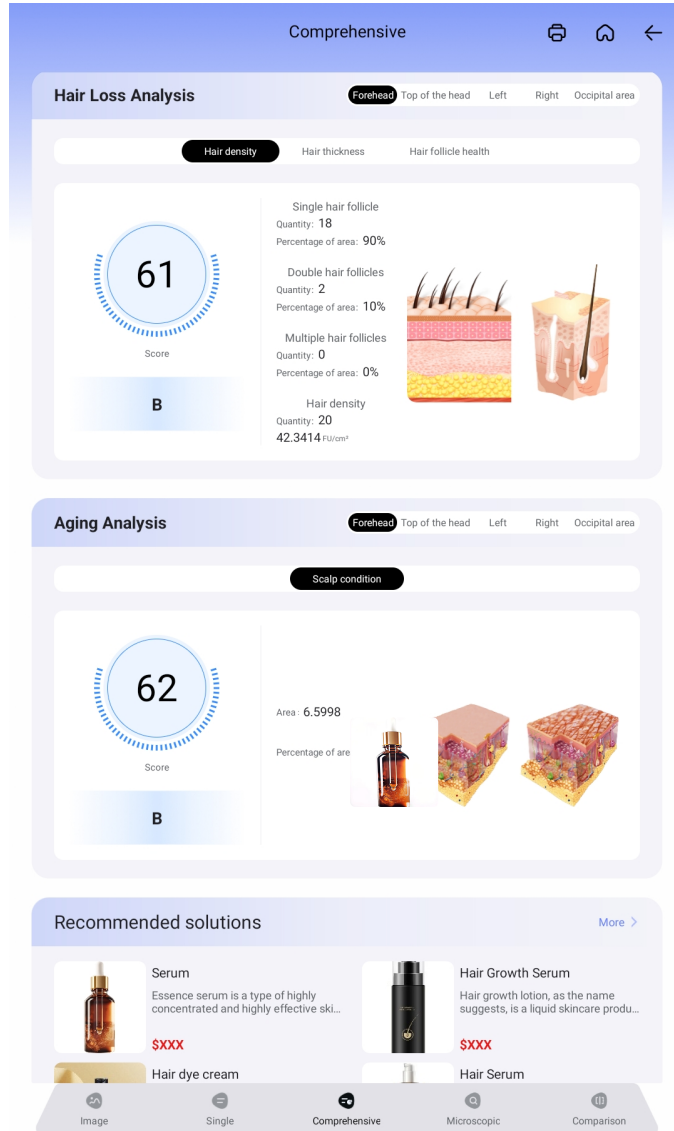
Sebum Analysis

Sensitivity Analysis

Gray Hair Analysis



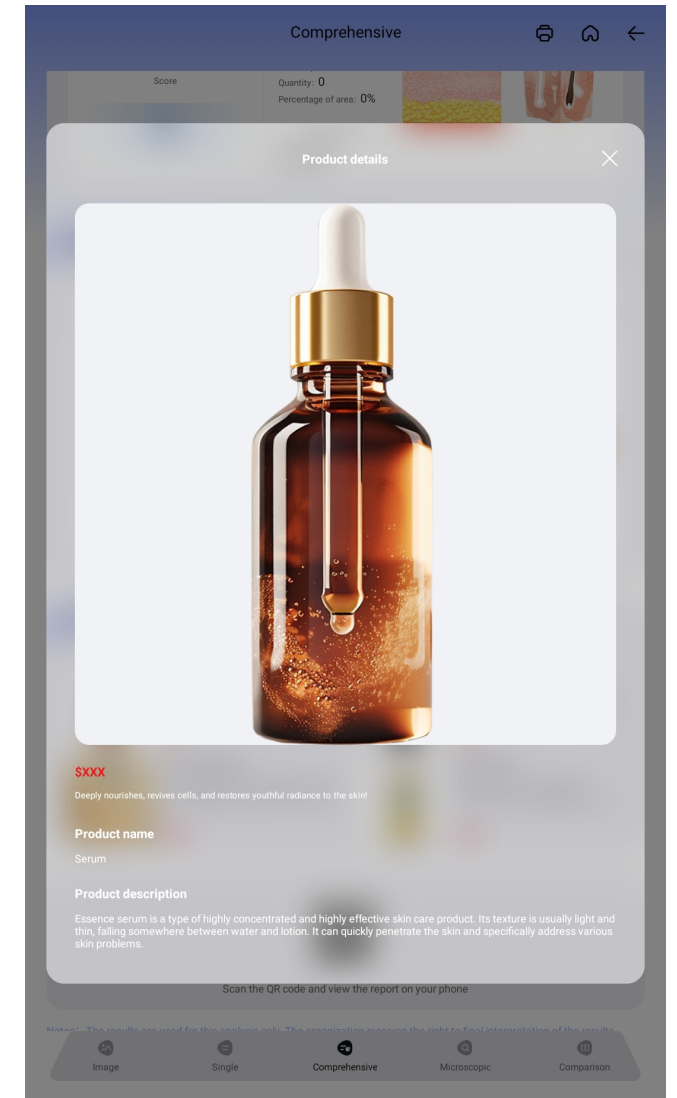
# Three Reporting Modes - Comprehensive Analysis Report 2



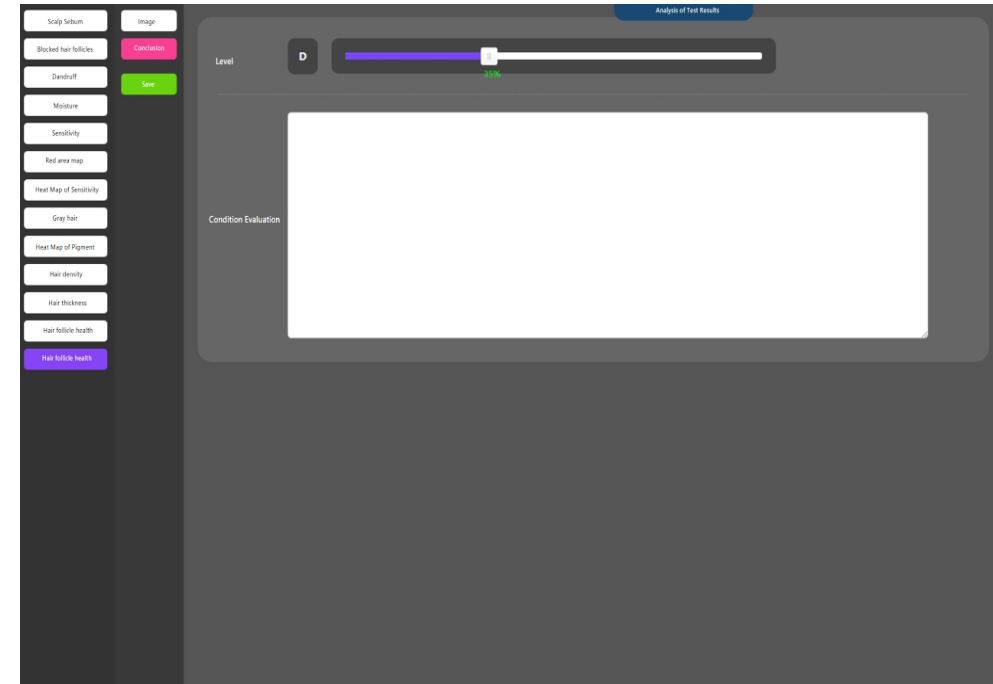
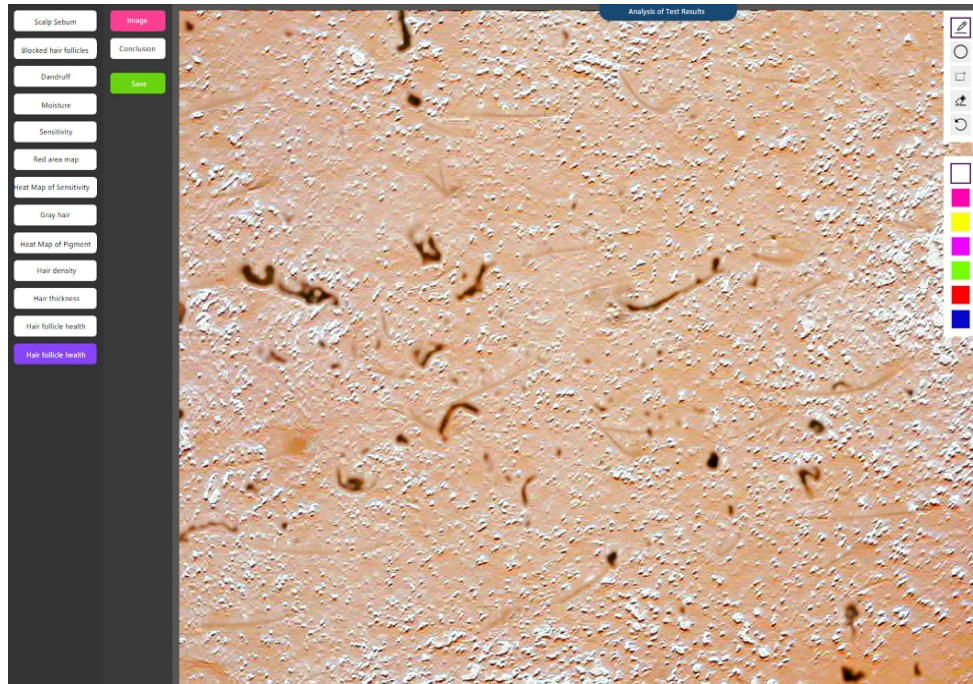
Hair Loss Analysis

Aging Analysis

Scheme recommendation



## Three Reporting Modes - Custom Report 4



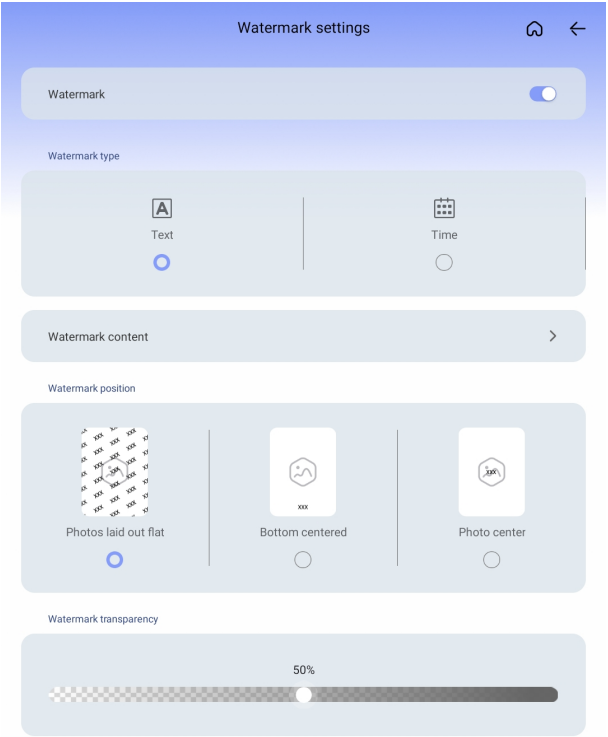
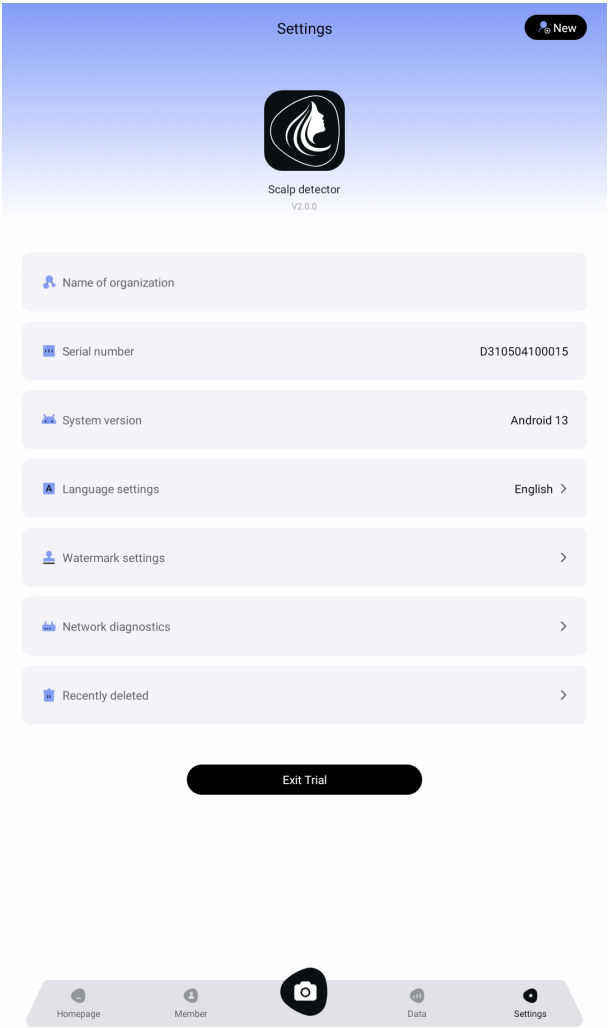
The background allows independent selection of images to be edited for annotation.

Customize any test results you want.

Each indicator can be adjusted for results.

Text can be edited freely.

# Watermark function





Watermark switch


Turn on the watermark switch to customize text watermarks and image watermarks.



# Birthday reminder function


 

### Create a new profile




 Name 

Please enter




 Gender 

☐ Male ☐ Female




 Birthday 

Please select



 Contact information 

Please enter

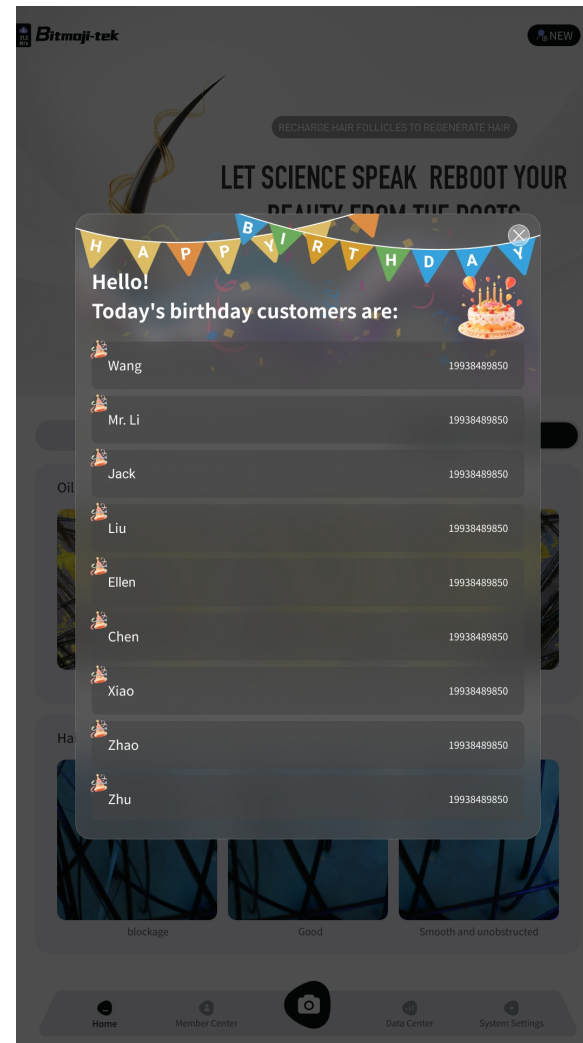


 Note 

0/200

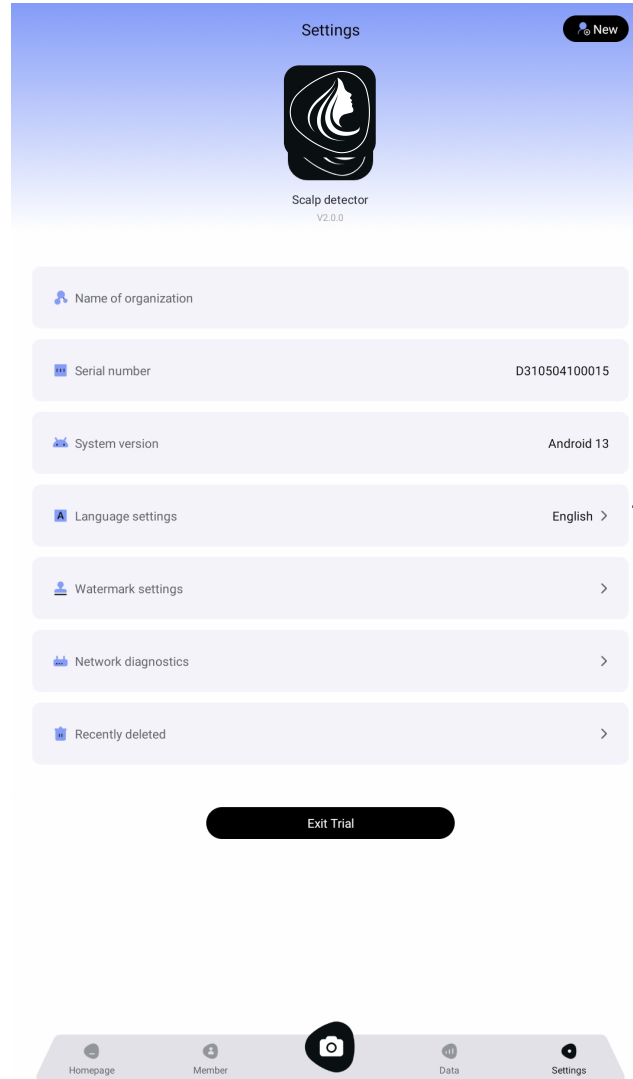
Please enter

Save



Automatically push the list of customers with birthdays on the day to enhance customer stickiness.

## My Devices



Serial number

Language settings

# Archives management

Member

New

2 customers

2 skin detection records

Q

Search customer's name/phone number

H

hhvfgd

Male | 21 | 156845662665

08-30 13:55

P

prejd 2 times

Male | 22 | 15278976536

08-30 10:19

That's the end of the results

Homepage

Member

Data

Settings

History

Create a new profile

←

Create a new profile

Name

Please enter

Gender

Male

Female

Birthday

Please select

Contact information

Please enter

Note

Please enter

0/200

Save

## Data Center

### Year and month can be selected

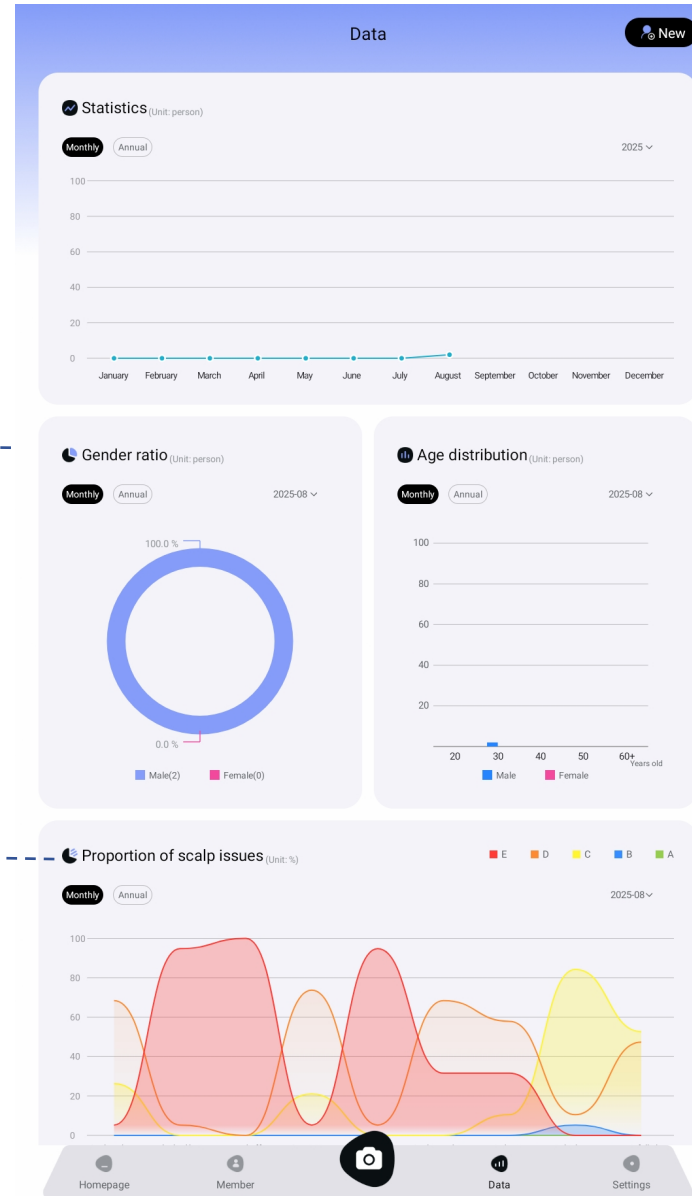
The number of customers entering the store in a month or a year can be displayed more intuitively in the form of a line chart.

### Male to female ratio

The number of male and female customers entering the store can be presented in a data format to make the proportion of male and female customers more clearly and intuitively visible.

### Proportion of problems

People in the current group are divided into five levels by means of data, and the data of each indicator are represented by different colors.

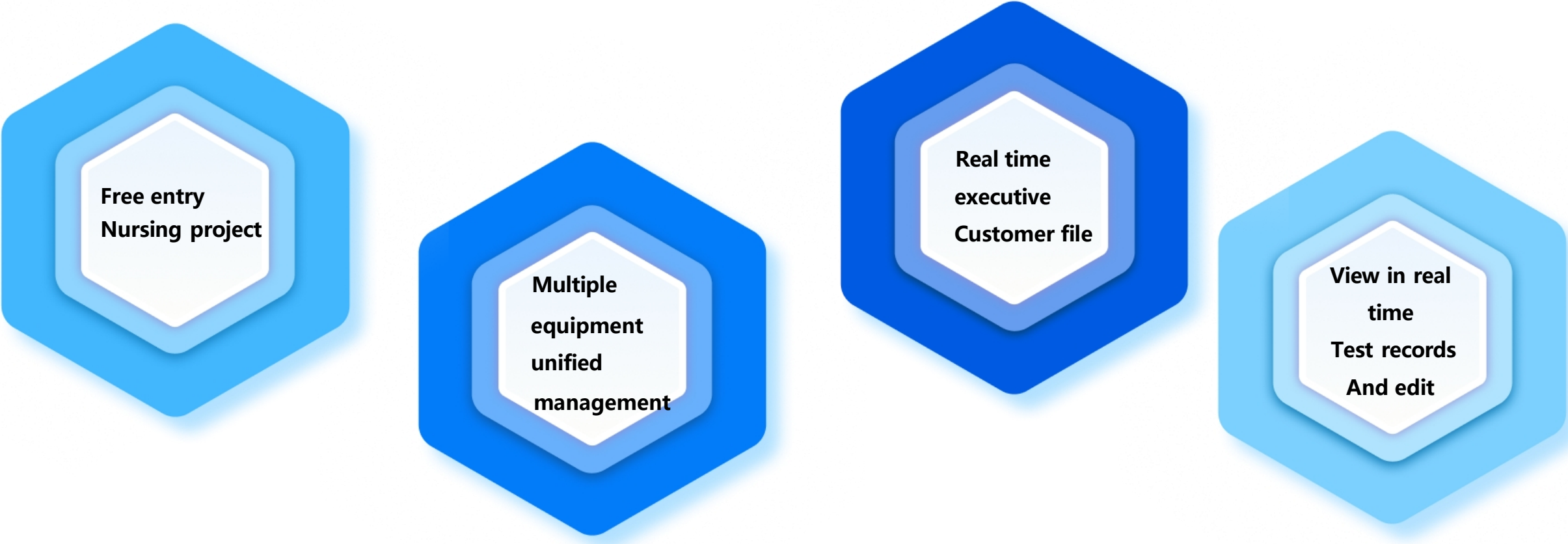


### Year can be selected

### Age distribution

Present the number of people entering the store through age segmentation in the form of data.

## Back-stage management



The image displays four hexagonal icons arranged horizontally, each with a light blue outer ring and a darker blue inner ring. The text is centered within the inner ring. The first icon (leftmost) is light blue and contains the text 'Free entry' and 'Nursing project'. The second icon is dark blue and contains the text 'Multiple equipment unified management'. The third icon is dark blue and contains the text 'Real time executive' and 'Customer file'. The fourth icon (rightmost) is light blue and contains the text 'View in real time', 'Test records', and 'And edit'.

Free entry  
Nursing project

Multiple  
equipment  
unified  
management

Real time  
executive  
Customer file

View in real  
time  
Test records  
And edit



02

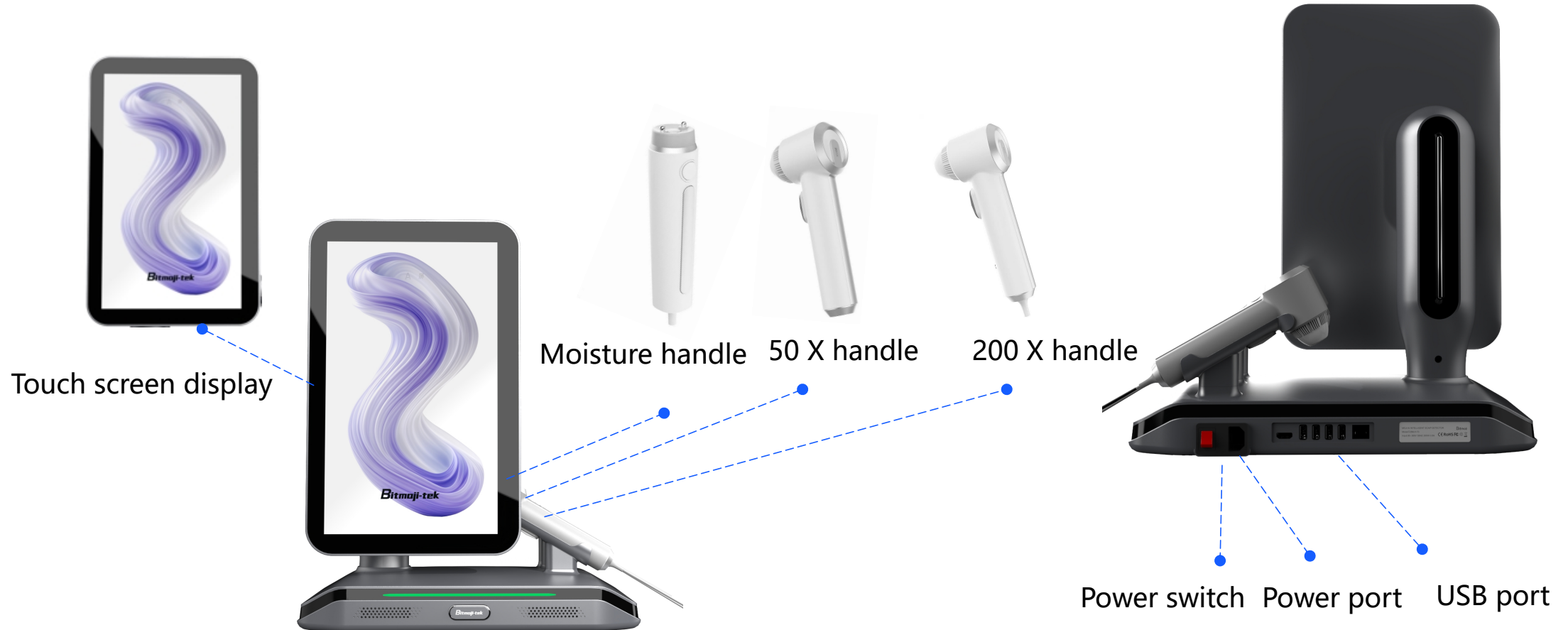
HARDWARE  
PARAMETERS

T3 AI Intelligent Scalp Analyzer

Hardware parameters

| Parameter information   |   | T3 |
|-------------------------|---|----|
| Type number             | T3  |    |
| Light spectrum          | White light, positive polarization, negative polarization, UV |    |
| Product material        | Industrial grade ABS  |    |
| Electric source         | AC100-260V,50/60Hz  |    |
| Product size            | 415 x229 x498mm   |    |
| Central processing unit | The Cortex-A53 has up to 2.3GHz octa-core                     |    |
| Main plate              | MT-6765 motherboard with Android 13 operating system          |    |
| Internal memory         | Dual channel LP DD R4, 4G                                     |    |
| Hard disk               | MMC5 .1, 32G  |    |
| Mode of operation       | Multipoint capacitive touch                                   |    |
| Screen feature          | reversible  |    |
| WIFI                    | Built-in dual-band WIFI(2.4G, 5G)                             |    |
| HDMI                    | 1 Pcs   |    |
| USB                     | 4 Pcs   |    |
| Screen scale            | 16:9  |    |
| Screen size             | 15.6 inches   |    |
| Screen pixel            | 1920 * 1080   |    |
| Other accessories       | 50px hand, 200px hand, moisture detection hand, power cord    |    |

## Hardware parameters







03

FOUR-SPECTRAL  
IMAGE ANALYSIS

T3 AI Intelligent Scalp Analyzer

# Four-spectrum **image analysis**



**White light**

## Theory:

Under uniform natural light illumination, stray light is filtered out to clearly present visible scalp problems in the epidermis to the naked eye. Under white light, the distribution characteristics of scalp texture, skin grooves, and skin ridges can be observed. It can be used to observe issues such as scalp color, hair density, hair thickness, and scalp sensitivity.



**Positive polarization light**

### Theory:

Parallel polarization technology is used to capture images formed by light reflected from the surface (stratum corneum) of the scalp skin entering the camera. It suppresses scattered light beneath the scalp surface, enhances epidermal reflection, and improves the clarity of imaging for skin surface textures. By magnifying local details, it allows for clear observation of issues related to the smoothness of skin textures, such as oiliness and scalp texture.





**Positive polarization light**

### Theory:

A special cross-polarizer lens group is adopted, which can effectively reduce direct reflected light. The cross-polarization mode captures images formed by light reflected from the basal layer and dermis of the scalp skin entering the lens. Since the basal layer and dermis are rich in melanin and hemoglobin, the cross-polarization mode is used to observe the deep conditions of the scalp skin (basal layer and dermis), displaying the status of capillaries and pigmentation. It aids in the auxiliary diagnosis and efficacy observation of symptoms such as white hair, hair thickness, hair follicle health, dandruff, red blood streaks, sensitive inflammation, as well as pigmentation-abnormal scalp problems..



UV light

### Theory:

With a wavelength of 365nm, the cells and tissues of the scalp skin have a natural function of converting invisible light into visible fluorescence, thereby effectively making the scalp skin a light emitter. UV light penetrates from the surface layer of the scalp skin to various layers, exciting different fluorescences. These fluorescences enter the lens to form images showing scalp symptoms, which can be used to detect problems such as blockage of scalp hair follicle openings, dandruff, and fluorescent agents.

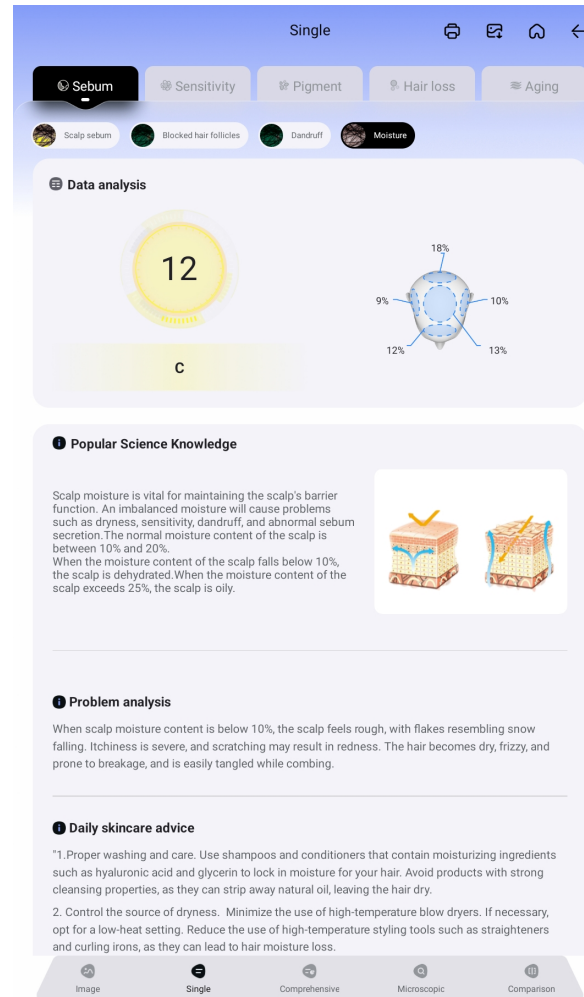
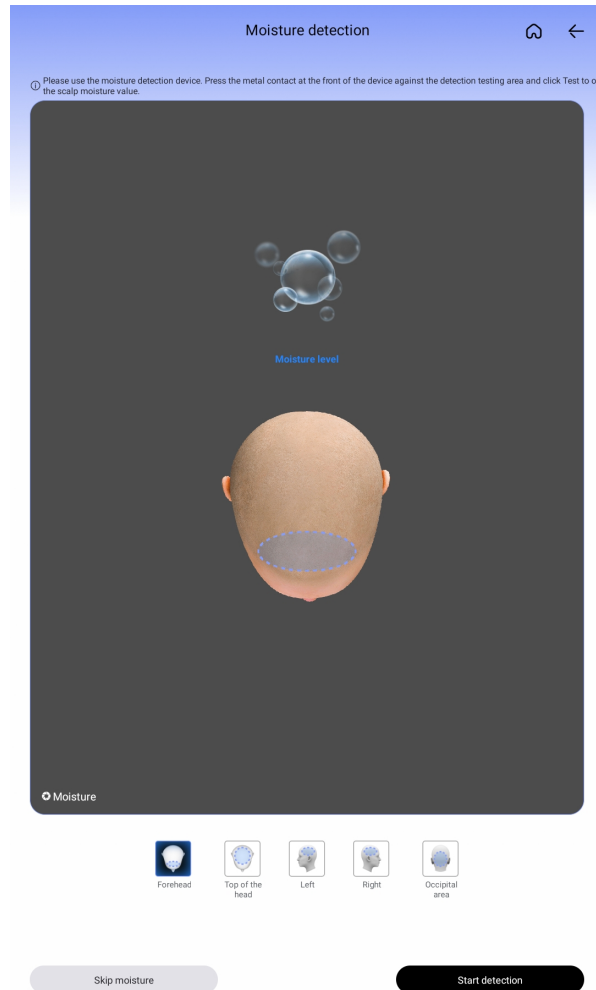


04

THRETEEN  
DETECTION  
INDICATORS

T3 AI Intelligent Scalp Analyzer

# Thirteen testing indicators - Moisture Report



Data analysis

Popular Science Knowledge

Problem analysis

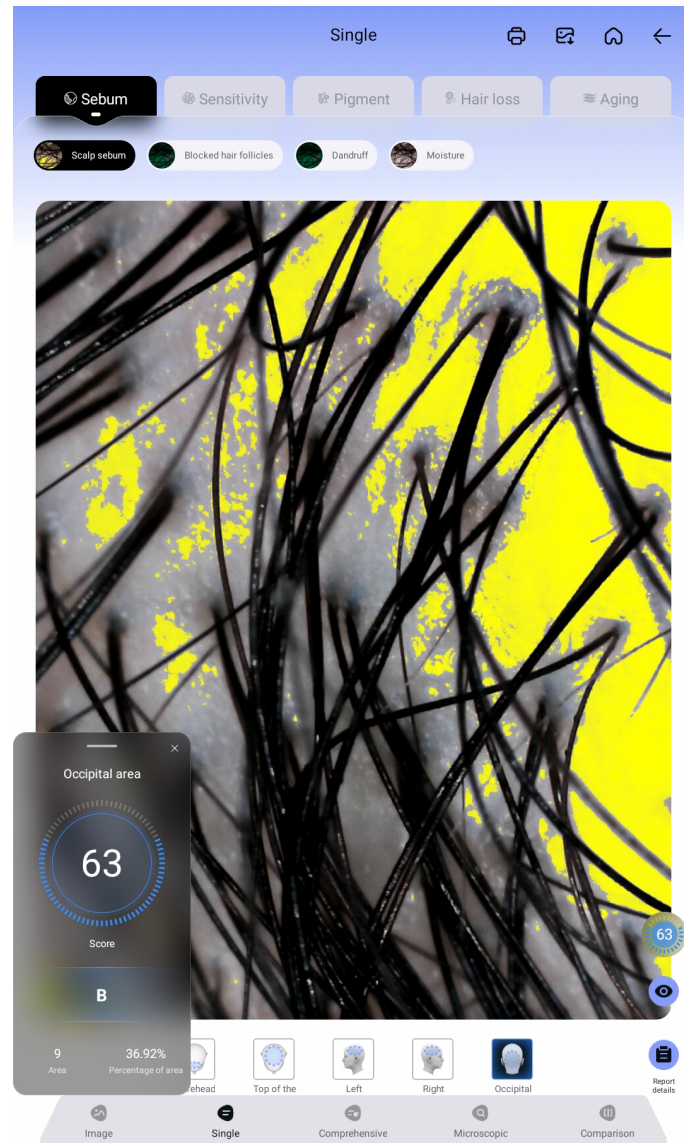
Daily skincare advice



Handheld scalp moisture detection tool



# Thirteen detection indicators



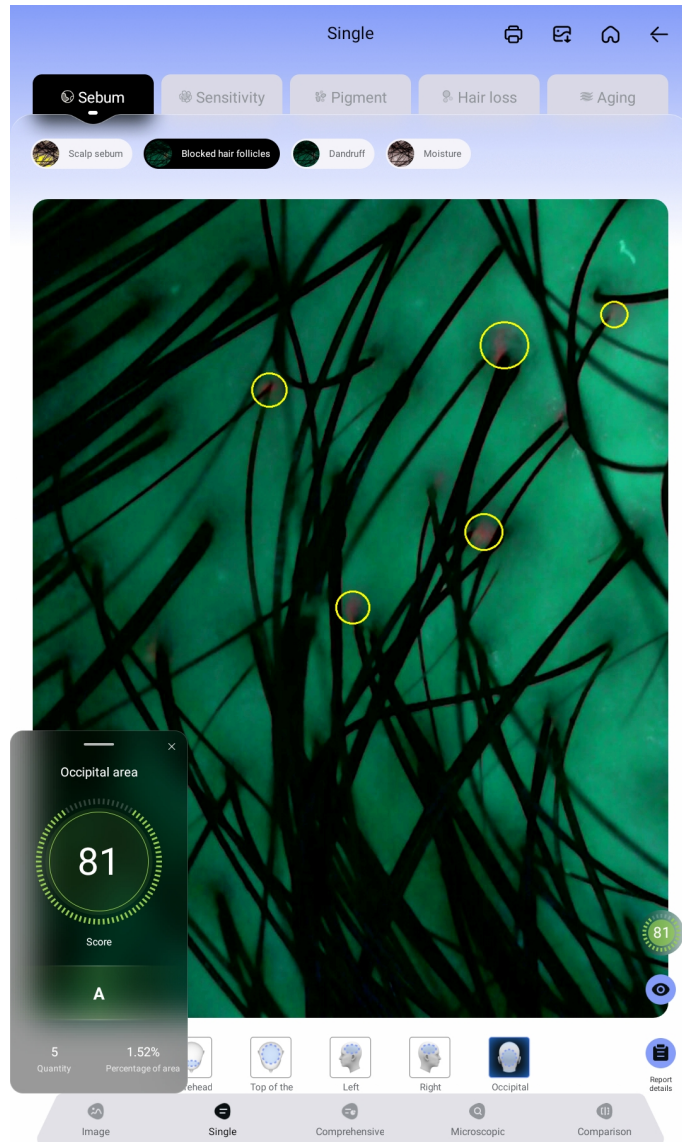
## Scalp sebum

### View analysis

- ❑ Under polarized light, the oil secretion on the scalp surface can be observed.
- ❑ The algorithm presents areas with excessive oil secretion on the scalp through yellow fluorescence, making the scalp oil condition more clearly and intuitively visible in the form of data.
- ❑ Excessive oil secretion can make the scalp look greasy and shiny, and it easily absorbs dust, breeds bacteria and fungi (such as Malassezia), which in turn can cause scalp problems like seborrheic dermatitis and folliculitis, and may even lead to hair loss. However, if oil secretion is too little, the scalp will become dry, producing dandruff, and the hair will be dry and prone to breakage.



# Thirteen detection indicators

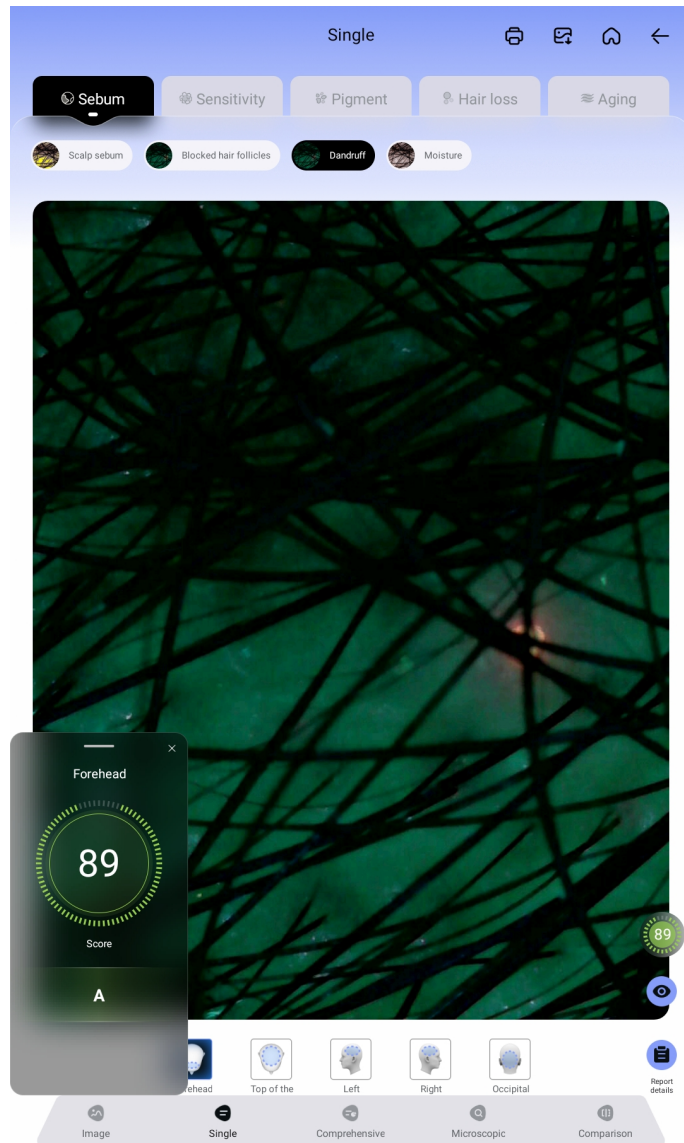


## Blocked hair follicles

### View analysis

- ❑ Under UV light, the blockage of scalp hair follicles can be observed.
- ❑ The algorithm presents the areas with blocked hair follicles on the scalp through yellow circles, making the condition of hair follicle blockage more clearly and intuitively visible in the form of data.
- ❑ When sebum secretion is excessive and cannot be discharged in a timely manner, it tends to accumulate in the hair follicles, thereby causing blockage. Blocked hair follicles provide a favorable environment for the growth of bacteria and fungi, which can easily trigger inflammations such as folliculitis and seborrheic dermatitis. These inflammations may lead to symptoms like scalp redness, swelling, itching, and pain, further damaging the health of the scalp.

# Thirteen detection indicators

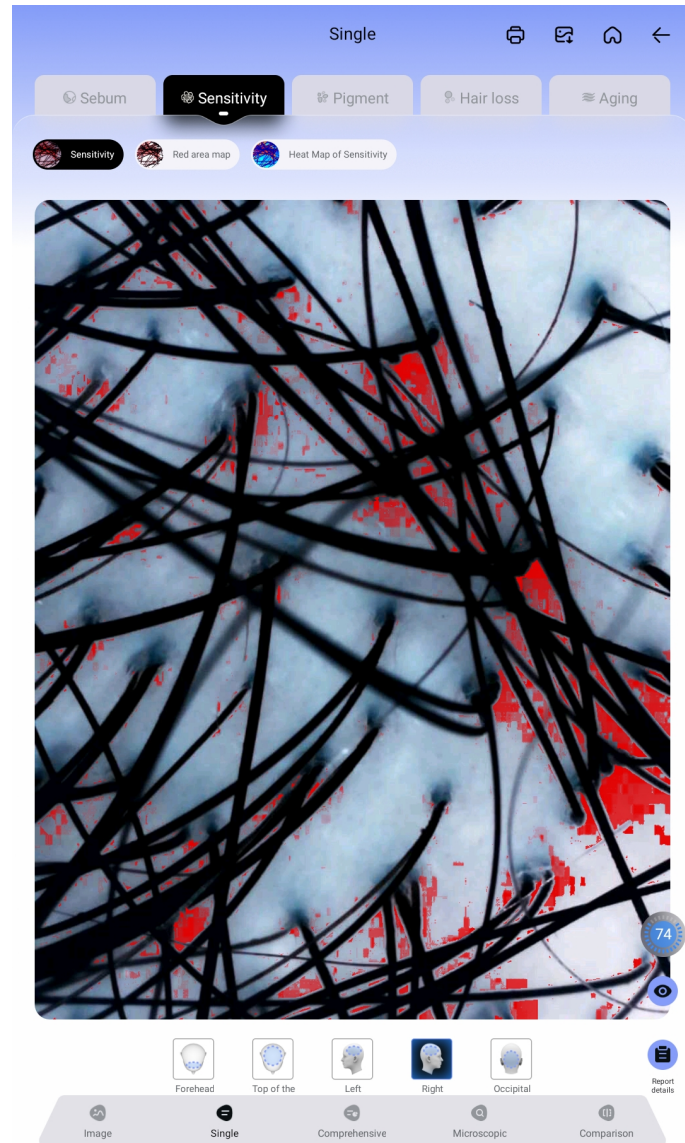


## Dandruff

### View analysis

- ❑ Under UV light, the distribution of dandruff on the scalp can be observed.
- ❑ The algorithm presents the dandruff areas on the scalp in the form of irregular white blocks, making the dandruff condition more clearly and intuitively visible through data.
- ❑ There is a microbial community on the scalp, and Malassezia, for example, is a common type of fungus. Under normal circumstances, it has a symbiotic relationship with the scalp. However, when Malassezia overgrows, it breaks down sebum to produce oleic acid, which irritates the scalp and causes excessive proliferation of the cuticle, thereby generating a large amount of dandruff.

# Thirteen detection indicators

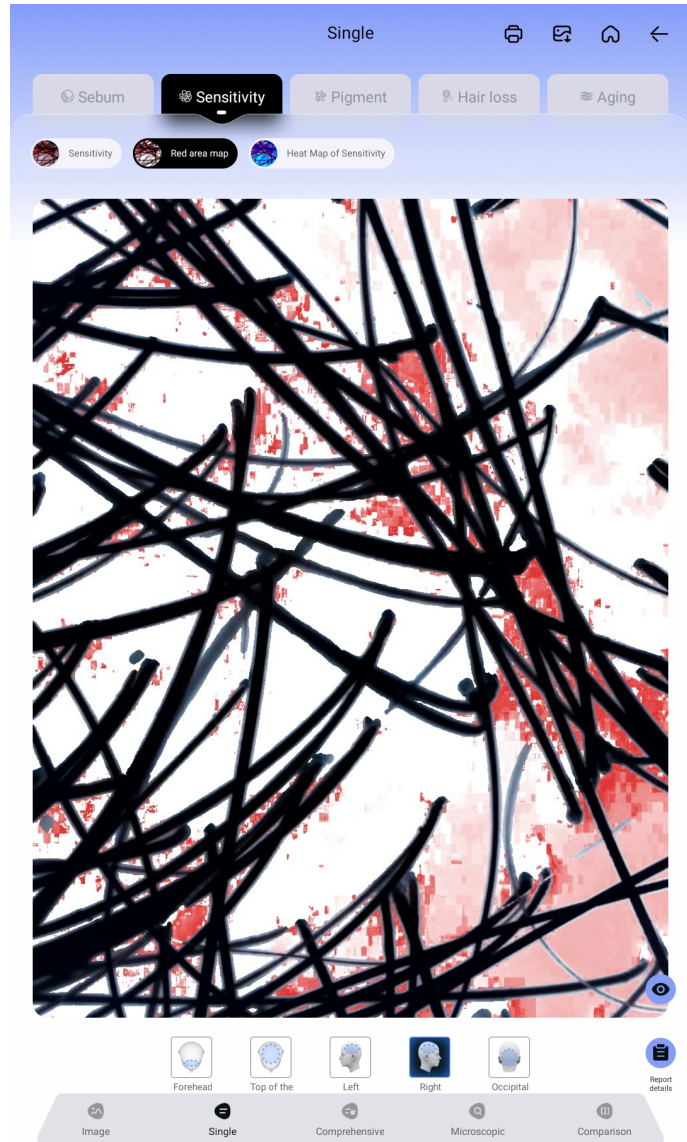


## Sensitivity

### View analysis

- ❑ In negative polarized light, we can observe the redness of the superficial skin and the distribution of red blood vessels.
- ❑ The algorithm presents sensitive areas on the scalp in red, making the sensitivity condition more clearly and intuitively visible through data.
- ❑ The clear presentation of red blood vessel distribution in polarized light indicates that the skin has a thin stratum corneum and is more sensitive, requiring proper protective care.

# Thirteen detection indicators



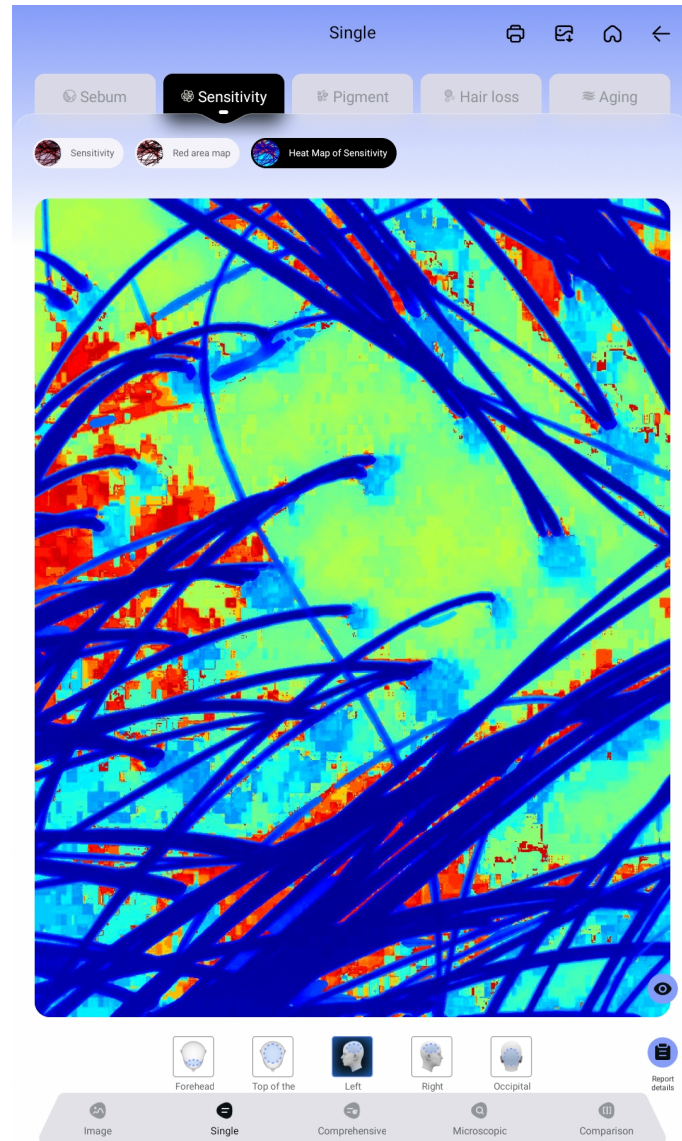
## Red area map

### View analysis

- ❑ In the red area map, we can check the redness of the superficial scalp and the distribution of red blood vessels.
- ❑ Areas with concentrated redness represent regions where scalp heme accumulation is relatively concentrated, which can serve as a reference for judging the scalp's sensitivity level and inflamed areas. The situation can be seen more clearly and intuitively through data.



# Thirteen detection indicators

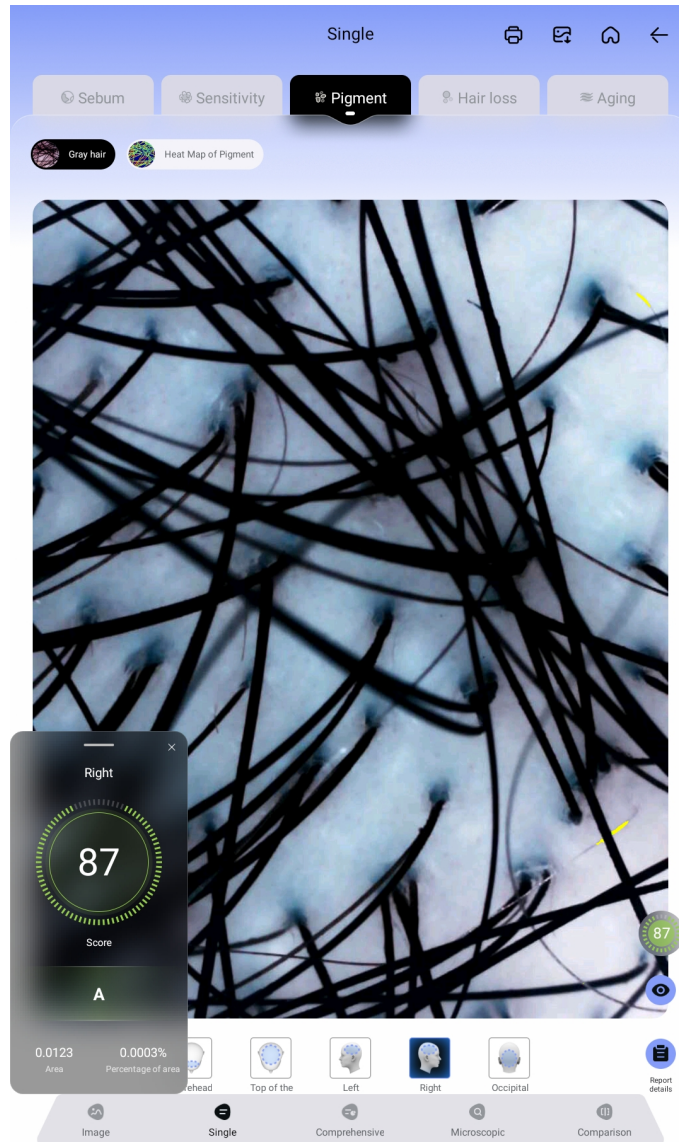


## Heat Map of Sensitivity

### View analysis

- ❑ Heat map of sensitivity presents the scalp sensitivity status. Severe scalp redness and thinning of the stratum corneum can make the scalp vulnerable to external stimuli and damage, leading to problems such as dryness and sensitivity.
- ❑ The algorithm displays different colors according to the severity of sensitive symptoms and their distribution areas on the scalp. Areas with severe sensitivity are shown in deep red, yellow indicates moderate sensitivity, green represents mild sensitivity, and blue indicates a normal state. The degree of sensitivity is reflected more clearly and intuitively through data.

# Thirteen detection indicators



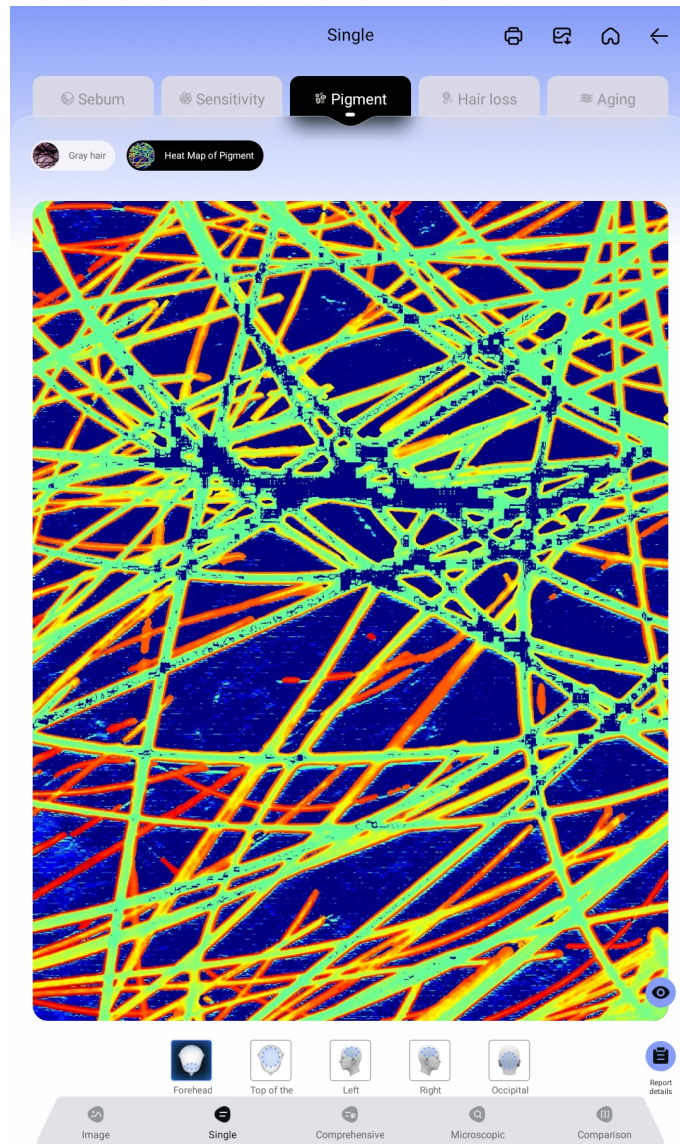
## Gray hair

### View analysis

- ❑ In the image, the AI algorithm presents white hair in yellow, making the white hair more clearly and intuitively reflected through data.
- ❑ The premature appearance of white hair is closely related to the decline of physical functions and nutritional imbalance. If it continues to develop, it may lead to more serious health problems.



# Thirteen detection indicators



## Heat Map of Pigment

### View analysis

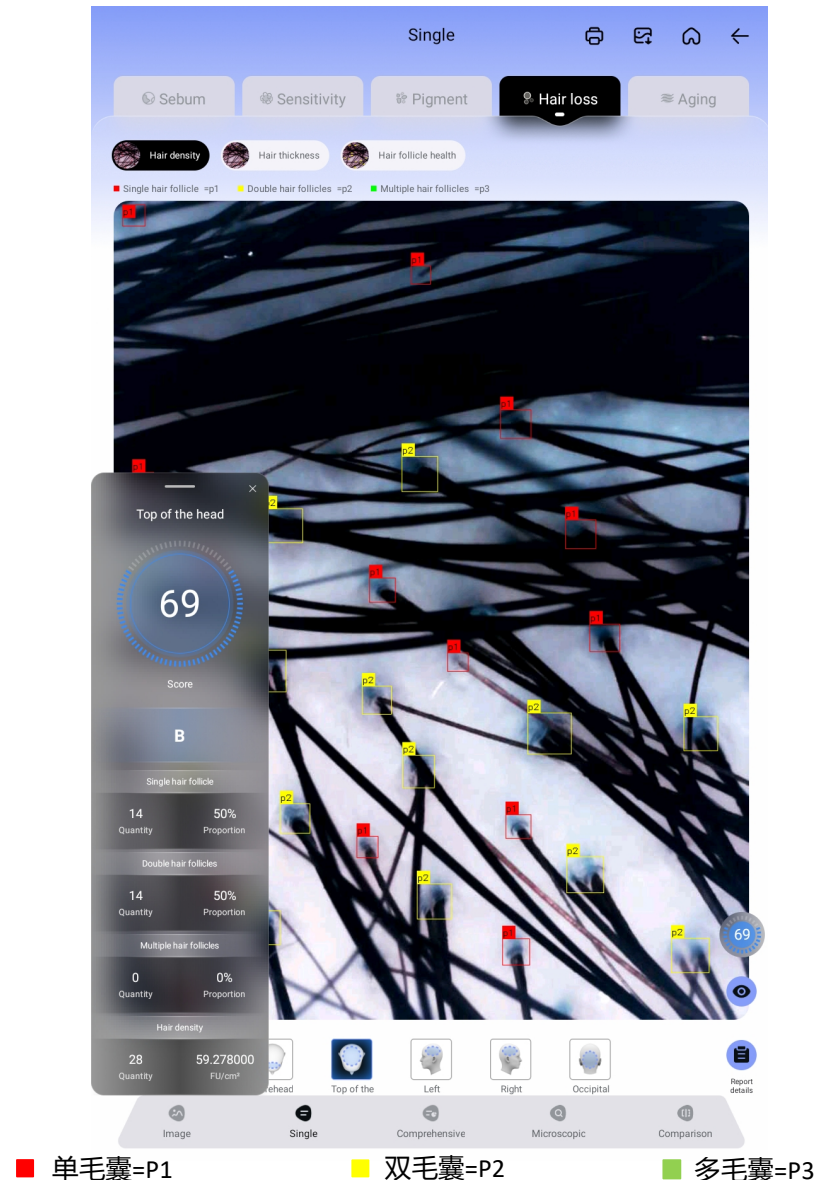
- ❑ Heat map of pigment can be used to check the loss of hair melanin on the scalp.
- ❑ The algorithm identifies the distribution of hair pigments on the scalp and presents it in the form of a heat map. Different colors are used to indicate the distribution of white hair, brown hair, and black hair visible to the naked eye under negative polarized light. Among them, red represents white hair, yellow represents brown hair, green represents black hair, and blue represents the scalp. The pigmentation situation can be seen more clearly and intuitively through data.

# Thirteen detection indicators

## Hair density

### View analysis

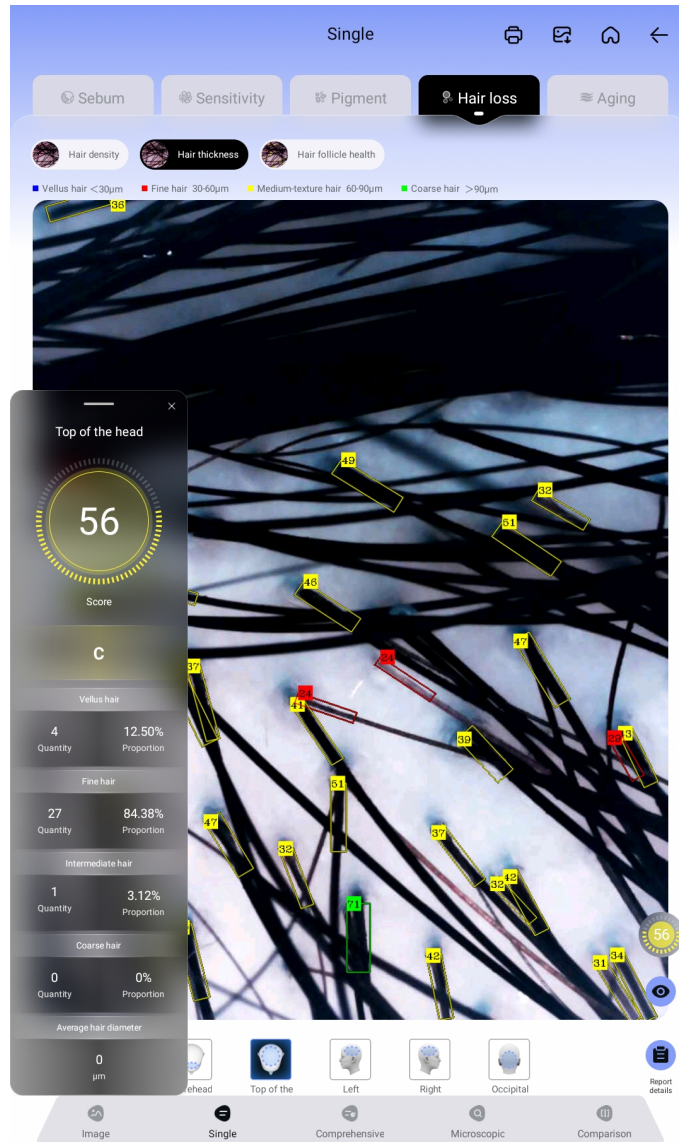
- ❑ The algorithm identifies the number of hair follicles at the hair follicle orifices and presents them through rectangular boxes of different colors. Among them, P1 indicates one hair at a hair follicle orifice, P2 indicates two hairs at a hair follicle orifice, and P3 indicates three hairs at a hair follicle orifice. The number of hair follicles can be seen more clearly and intuitively through data.
- ❑ Seborrheic dermatitis can also have an impact. Excessive sebum secretion and inflammatory reactions can block hair follicle orifices, damage hair follicles, interfere with the normal growth of hair, and cause hair loss.



# Thirteen detection indicators

## Hair thickness

### View analysis

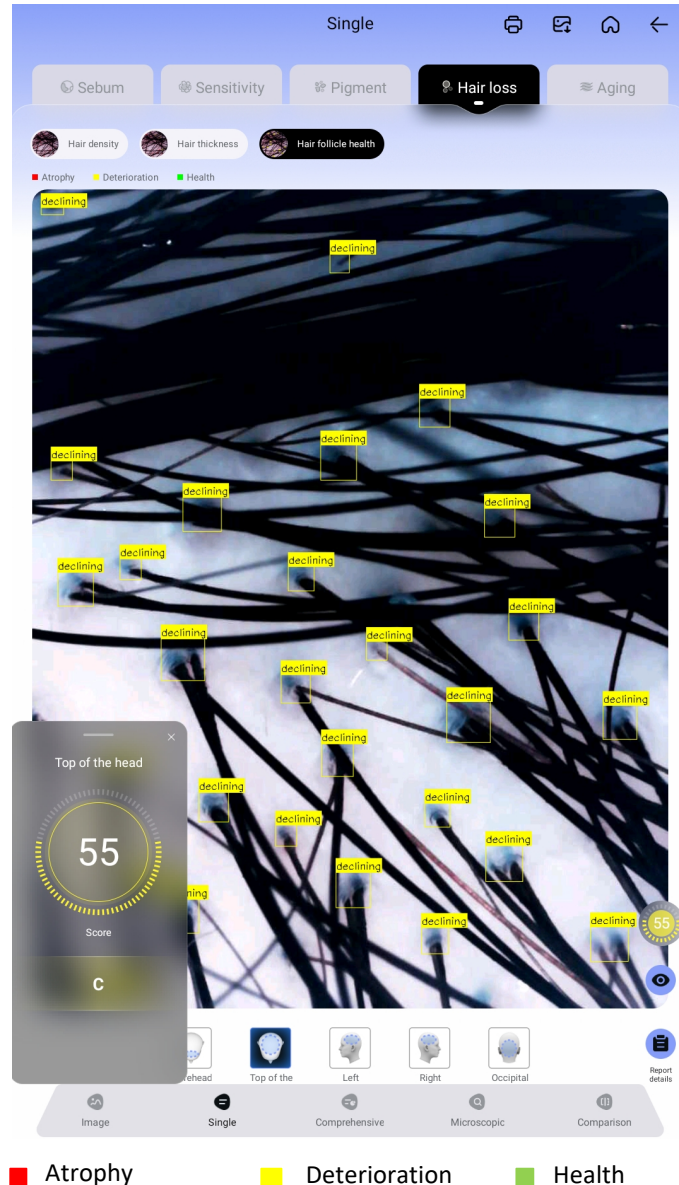


■ Vellus hair<30-60UP ■ Fine hair:30-60up ■ Medium-texture hair:60-90up ■ Coarse hair>90up

- ❑ The algorithm identifies the thickness of hair at the hair follicle orifices and presents it through rectangular boxes of different colors, with intuitive data labeling. Among them, blue represents vellus hair, red indicates relatively thin hair, yellow denotes moderately thick hair, and green stands for relatively thick hair. The thickness of the hair can be seen more clearly and intuitively through data.
- ❑ Seborrheic dermatitis can also have an impact. Excessive sebum secretion and inflammatory reactions can block hair follicle orifices, damage hair follicles, interfere with the normal growth of hair, and cause hair loss.
- ❑ Hormonal influences can slow down the body's metabolism, which may lead to hair thinning; however, if the hair follicles are not damaged, the thickness of the hair may return to normal after the disease is cured.



# Thirteen detection indicators

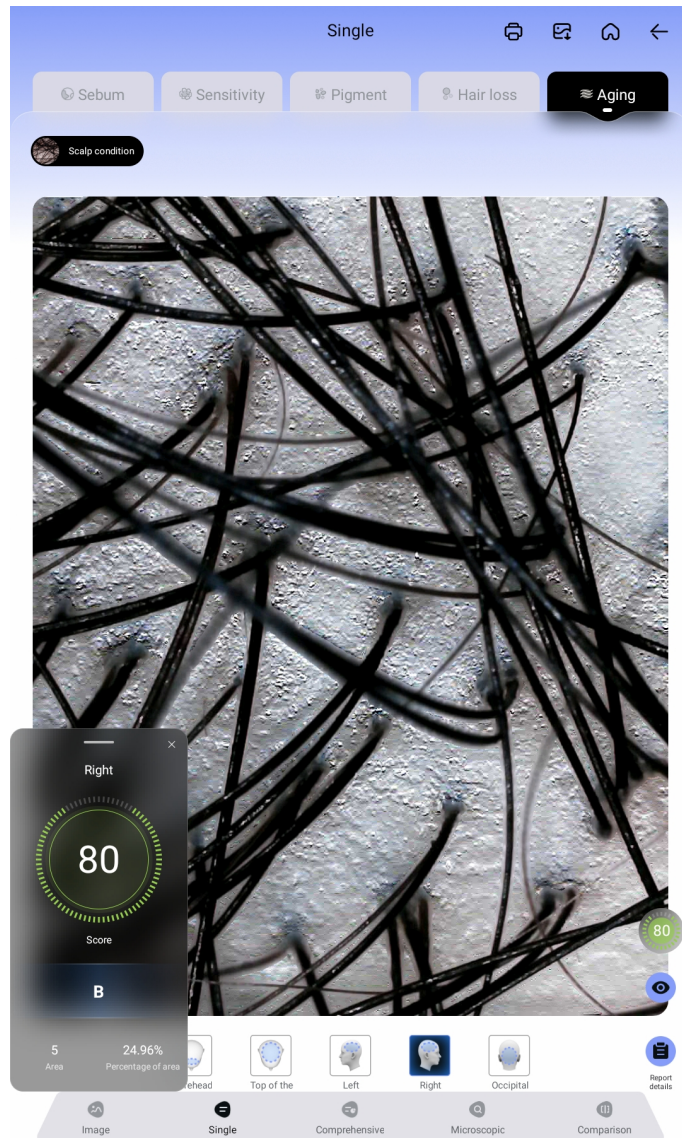


## Hair follicle health

### View analysis

- ❑ The algorithm identifies the health status of hair follicle orifices and presents them through rectangular boxes of different colors. Among them, green indicates healthy hair follicles, yellow represents declining hair follicles, and red signifies atrophied hair follicles. The condition of hair follicle health can be seen more clearly and intuitively through data.
- ❑ Hair follicles are the basic units for hair growth. They provide nutrients and physical support for hair growth and control the hair growth cycle, including the anagen phase, catagen phase, and telogen phase.

# Thirteen detection indicators



## Scalp condition

### View analysis

- ❑ Under positive polarized light, the texture of the scalp surface can be observed.
- ❑ The loss of elastic fibers and collagen in the scalp leads to reduced elasticity, sagging, and the appearance of wrinkles. In severe cases, this can cause 松弛 (relaxation) of the forehead skin and recession of the hairline.
- ❑ Hair follicles atrophy, resulting in hair becoming thinner and softer, slower growth, reduced hair volume, and exacerbated problems of white hair and hair loss.

【T3 AI Intelligent Scalp Analyzer】

# Product patent, test report, certification certificate display





# Wecome to join us