

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

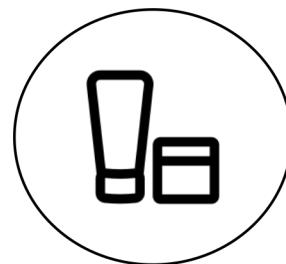


Hair transplant
clinic

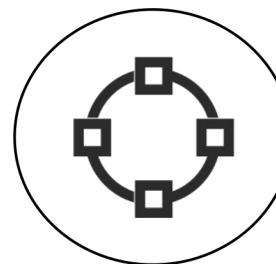


For household
use

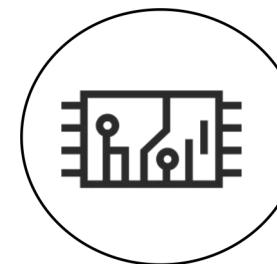
Technical advantages



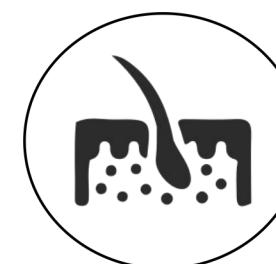
Product
recommendation



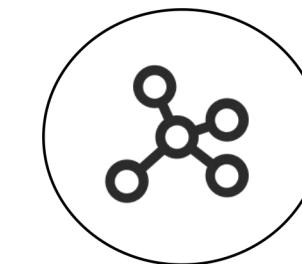
Four-spectral
analysis



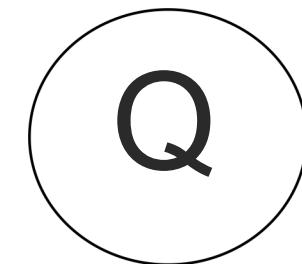
AI
algorithm



Hair follicle
detection



13 dimensional
indicators



200x/50x
magnification

Contents

01

**Function
coverage**

02

**Hardware
parameters**

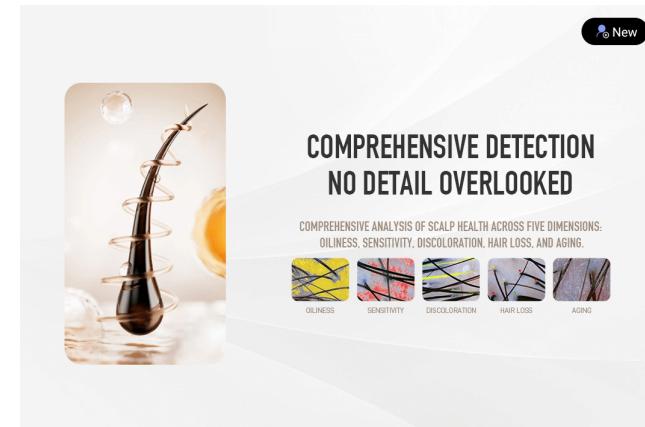
03

**4 spectrum
image
analysis**

04

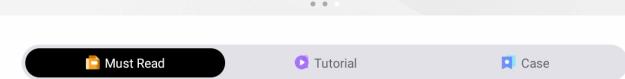
**13 analysis
detection
indicators**

APP Home page



New file

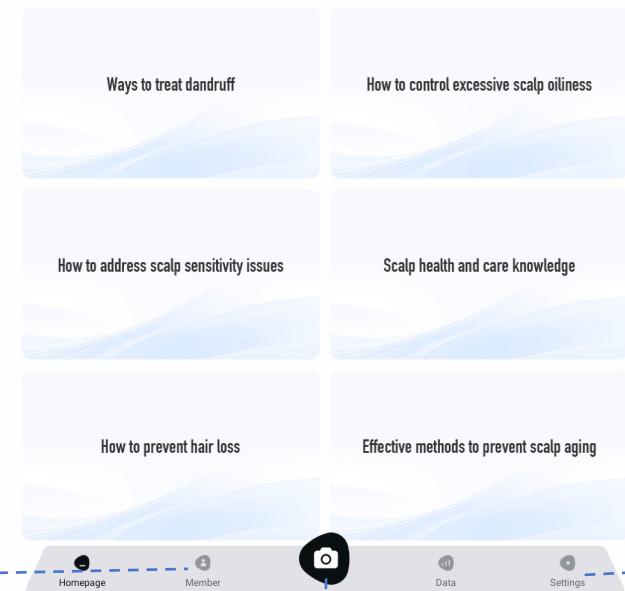
Must Read



Banner

Tutorial

Case



Data

Member

Settings

Camera button

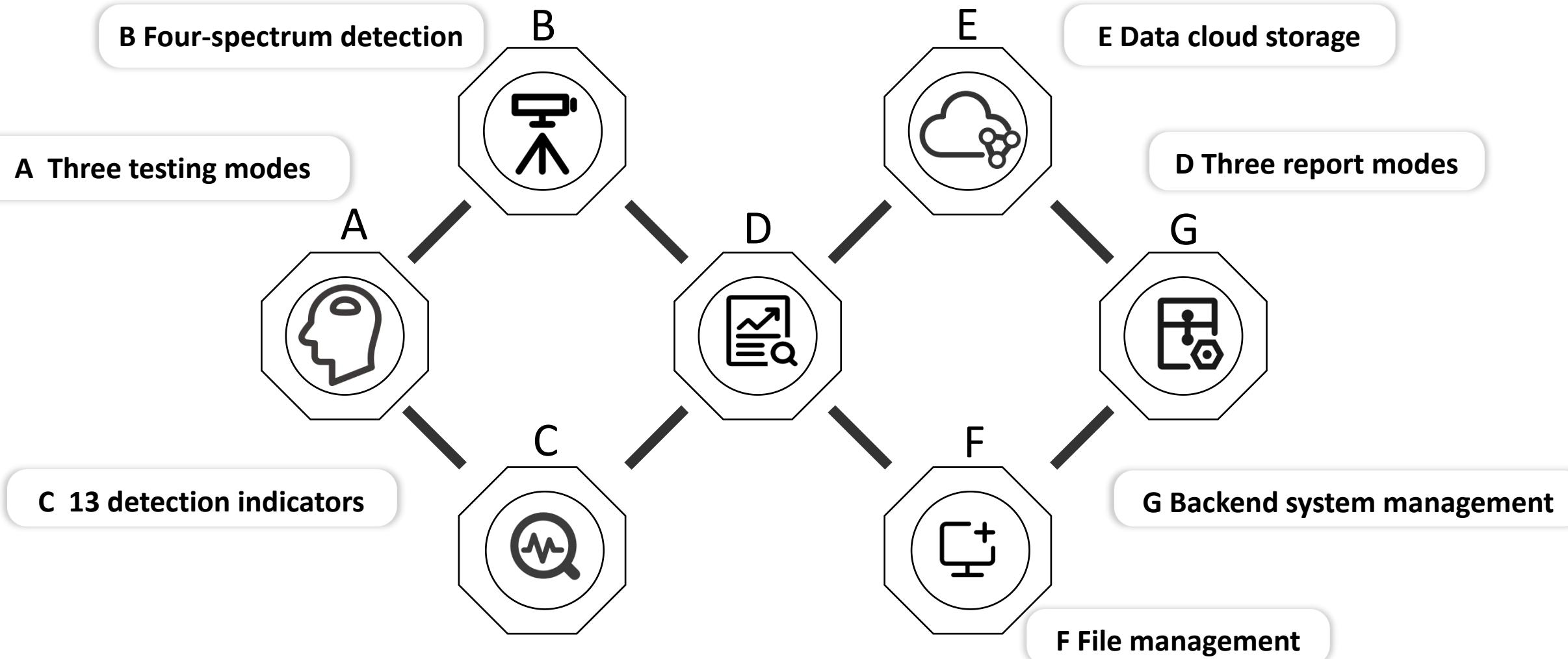


T3 AI Intelligent Scalp Analyzer

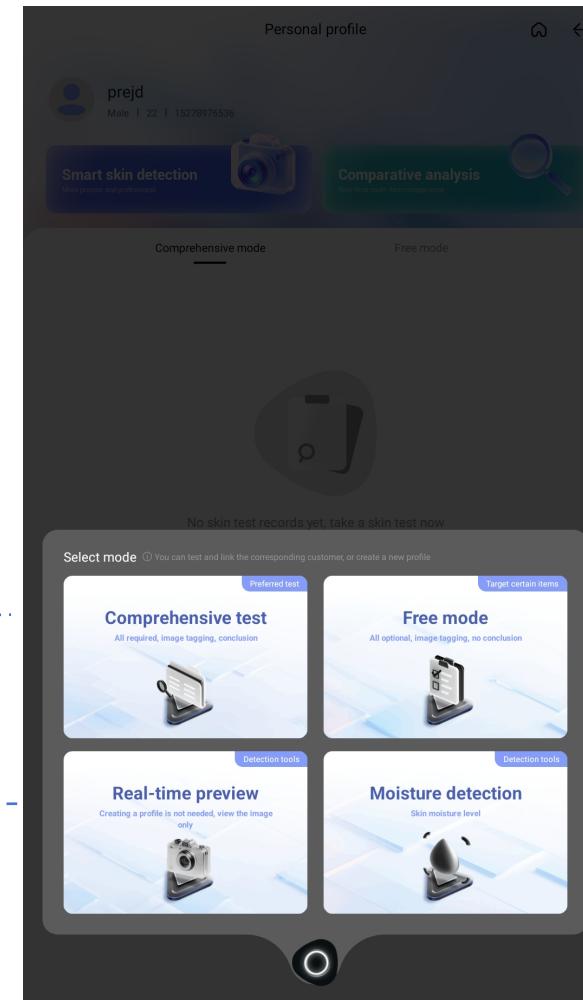
01

FUNCTIONS
COVER

Functional coverage



Four detection modes



Comprehensive test

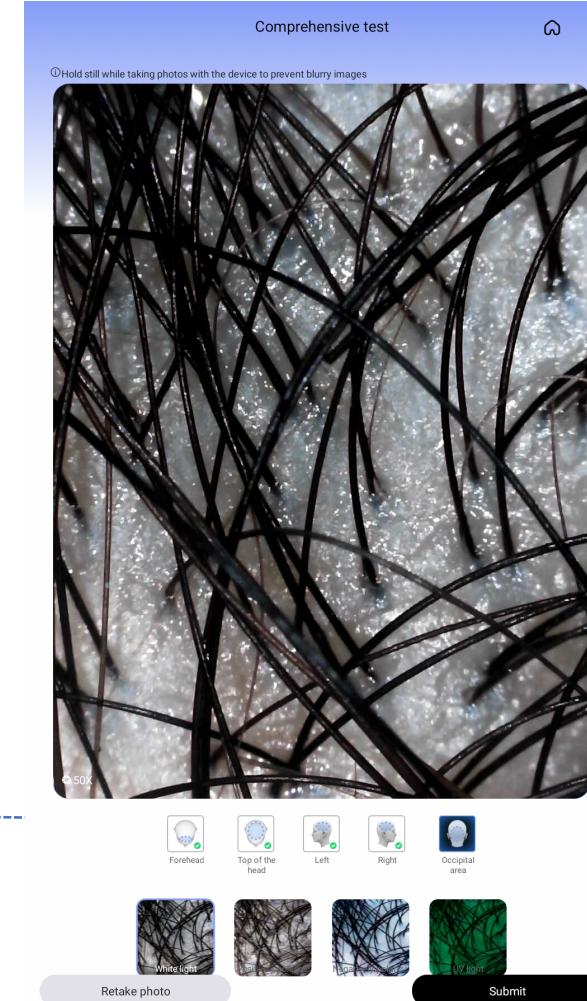
Free mode

Real-time preview

Moisture detection

Comprehensive test

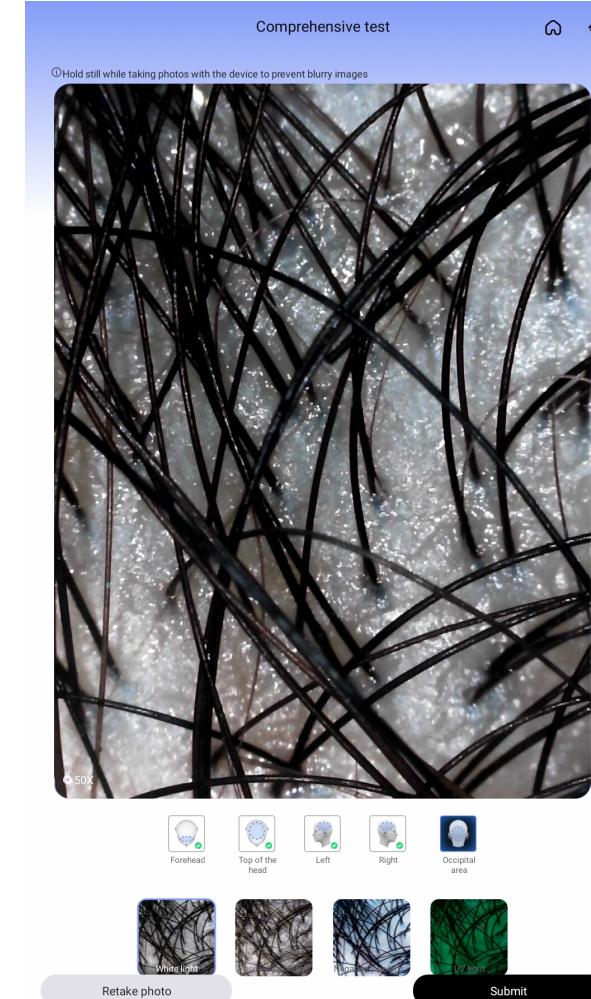
Four-spectrum shooting:
after all shots are completed,
click "Confirm" to jump to
the next part. After shooting,
you can choose to retake or
confirm.



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

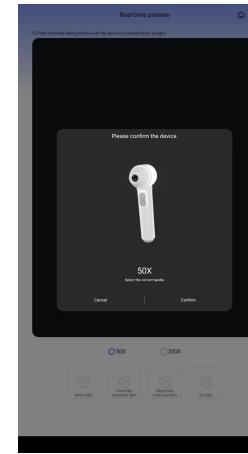
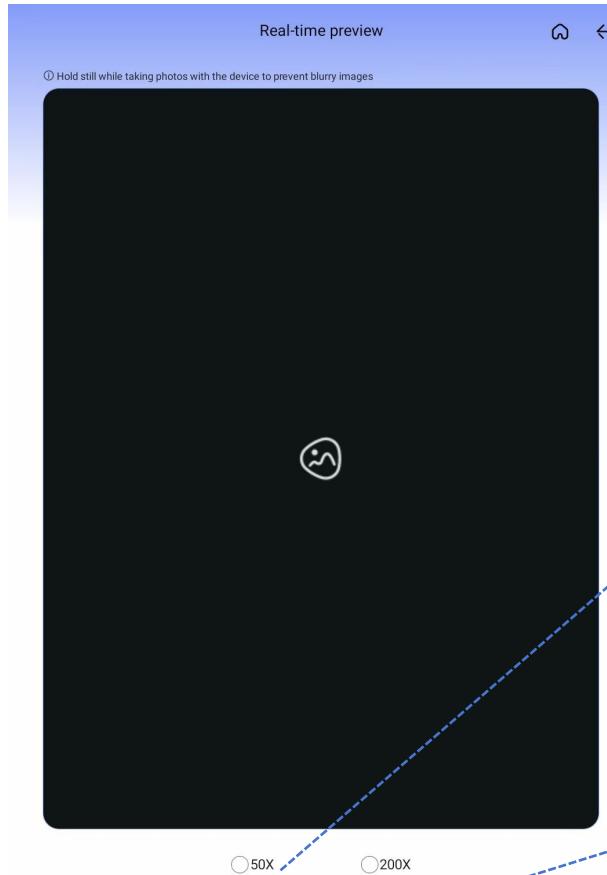
Free mode

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

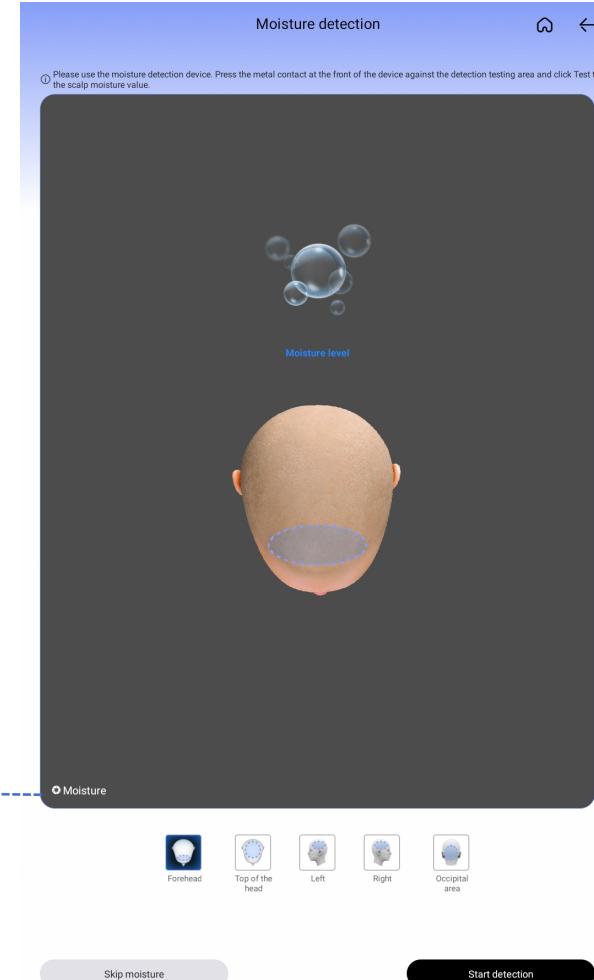


200X

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

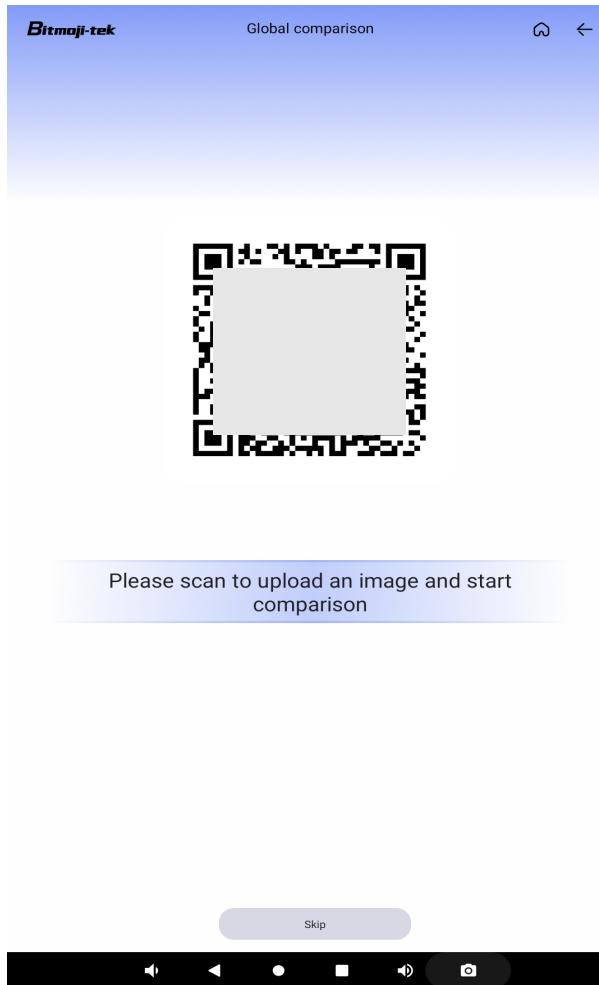
Moisture detection

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

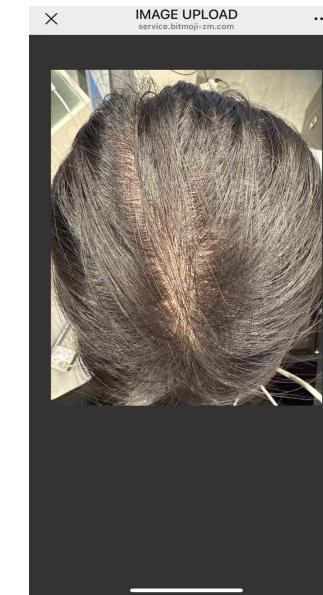


The detection parts are: forehead, top of the head, left , right, and occiput area.

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



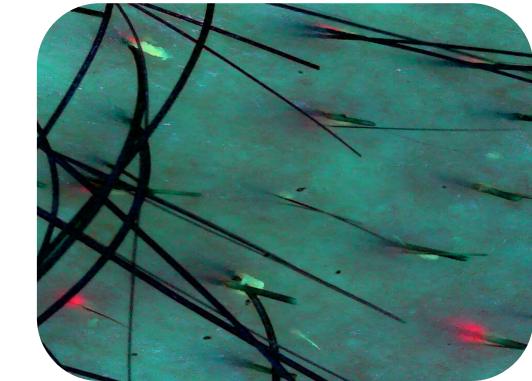
White light



Positive
polarization light



Negative
polarization light



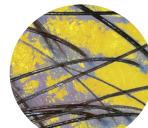
UV light

Thirteen detection indicators

Moisture



Scalp sebum



Blocked hair follicles



Dandruff



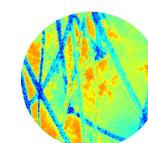
Sensitivity



Red area map



Heat Map of Sensitivity

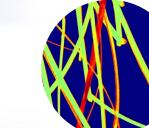


T3 AI INTELLIGENT IMAGER

Gray hair



Heat Map of Pigment



Hair density



Hair thickness



Hair follicle health



Scalp condition



Comparison mode

You can select any single indicator for comparison.

Different time points can be selected for comparison.



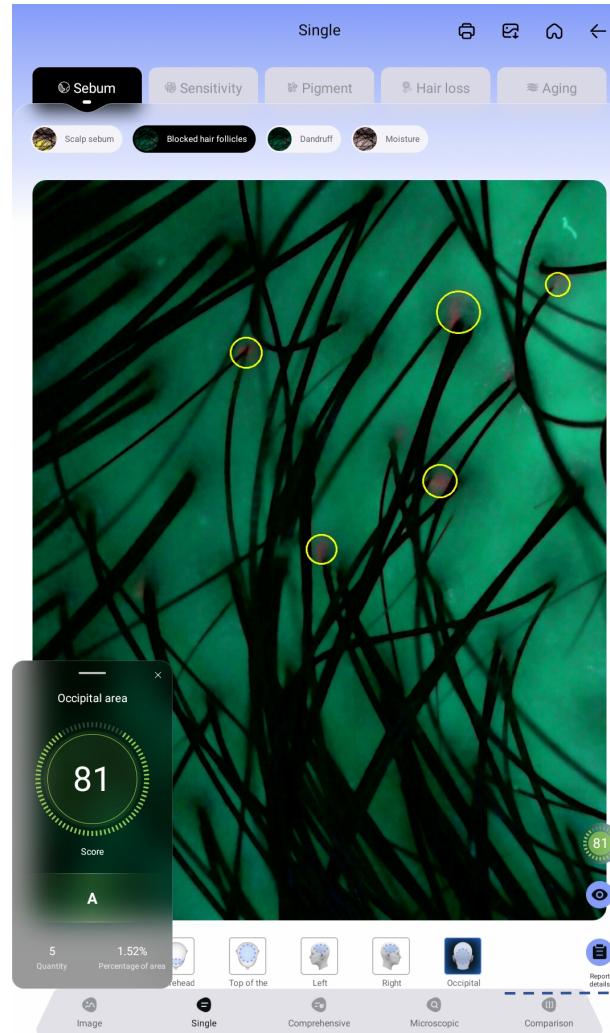
You can choose to compare locally or globally.

Different parts can be selected for comparison.



Global comparison

Three Reporting Modes - Single Independent Report 1



Five parts

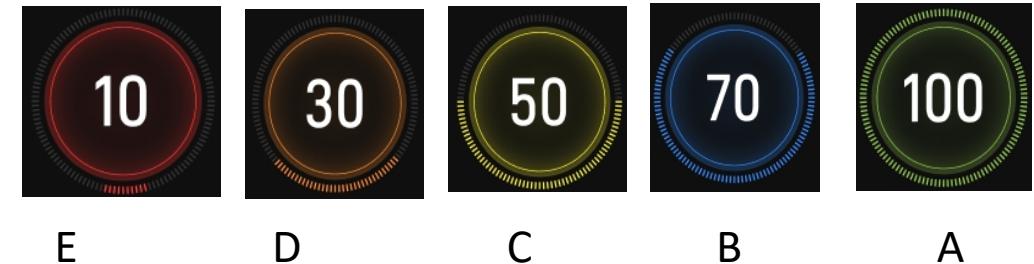


Data analysis

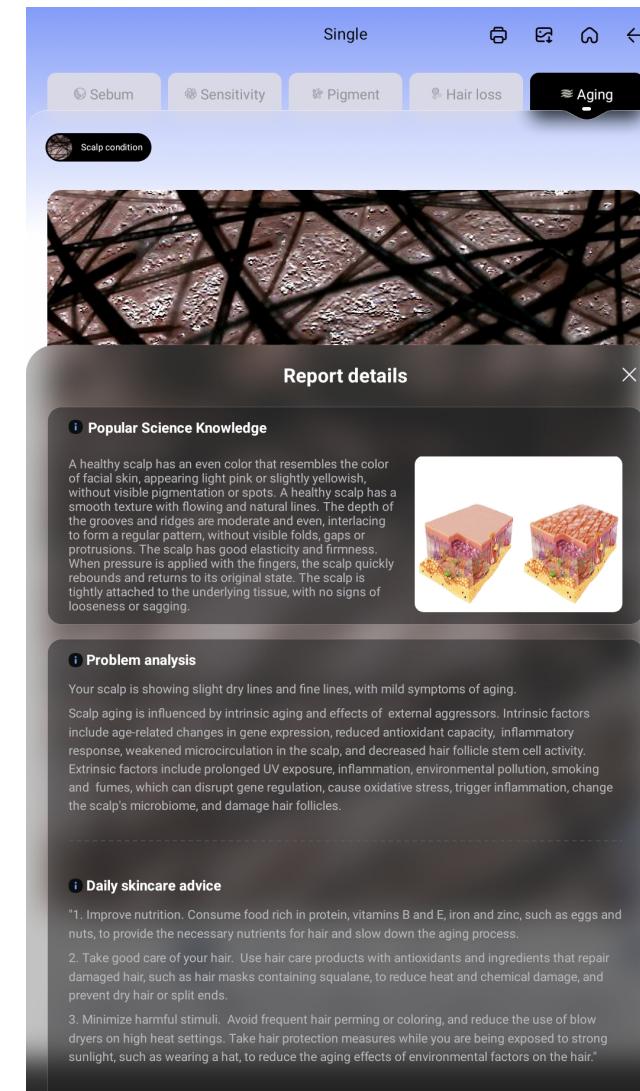
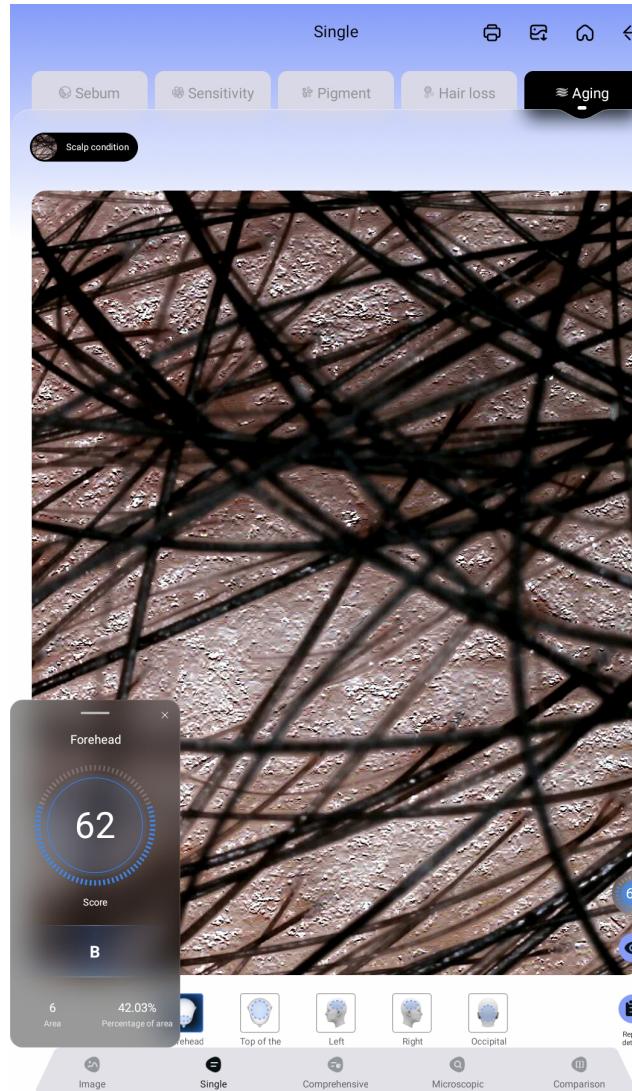
- 1.Score
- 2.Level
- 3.Quantity
- 4.Area
- 5.Proportion

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

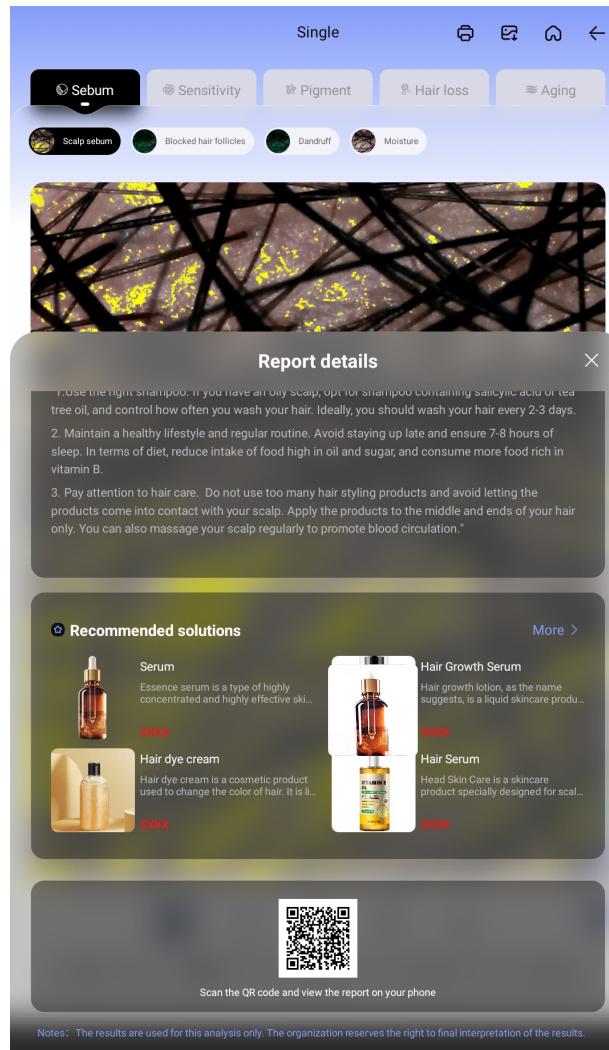


Three Reporting Modes - Single Independent Report 1

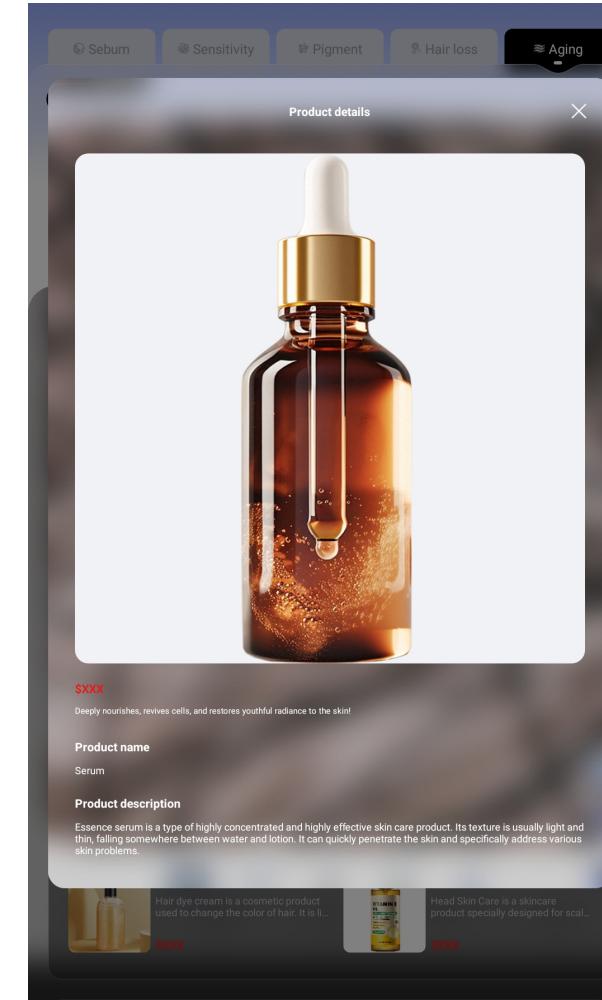


----- Report details

Three Reporting Modes - Single Independent Report 1



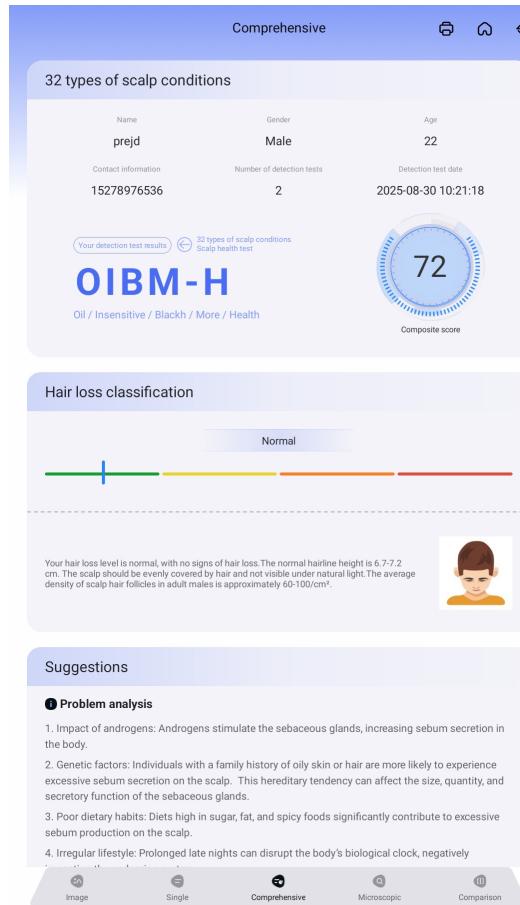
Product details page 



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

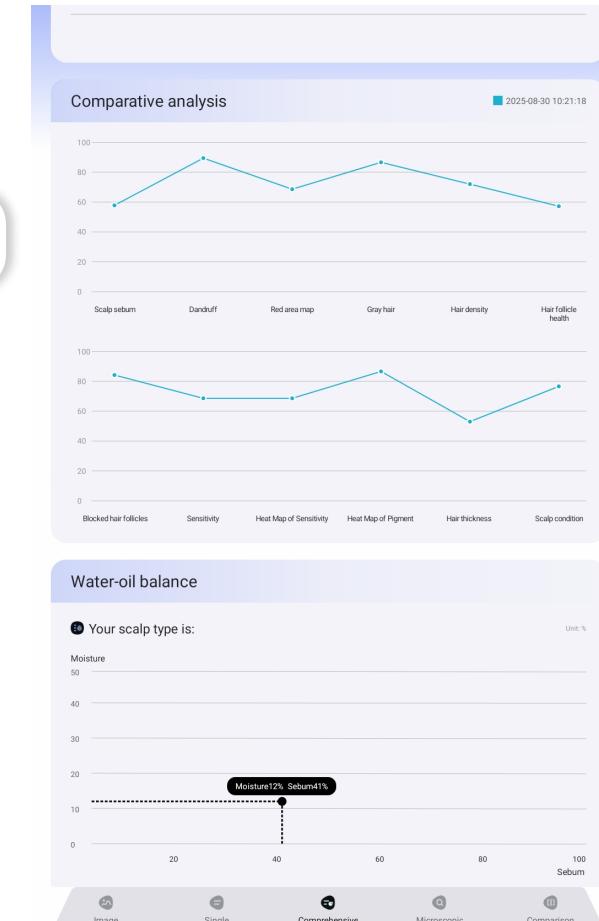


Personal information

32 types of scalp conditions

Hair loss classification

Suggestions

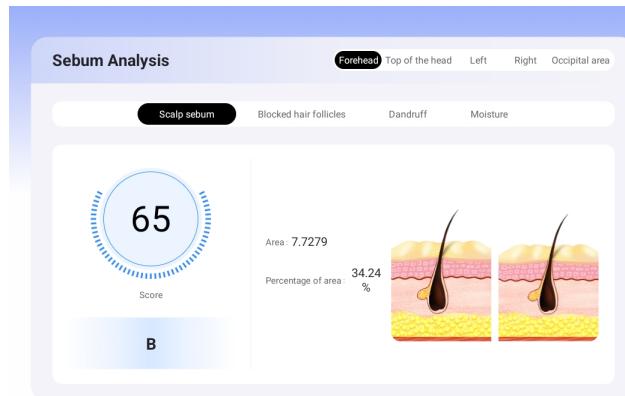


Comparative analysis

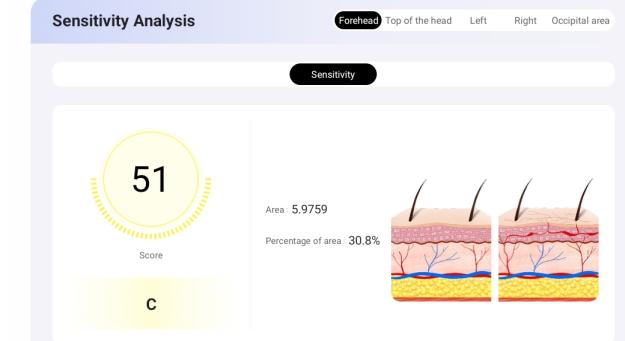
Scores of each individual test item

Water-oil balance

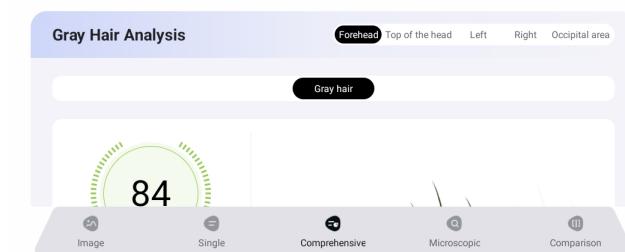
Three Reporting Modes - Comprehensive Analysis Report 2



Sebum Analysis



Sensitivity Analysis



Gray Hair Analysis

Three Reporting Modes - Comprehensive Analysis Report 2

Comprehensive

Hair Loss Analysis

Forehead Top of the head Left Right Occipital area

Hair density Hair thickness Hair follicle health

Score: 61

Single hair follicle: Quantity: 18, Percentage of area: 90% (Image: 3D skin cross-section with 18 follicles)

Double hair follicles: Quantity: 2, Percentage of area: 10% (Image: 3D skin cross-section with 2 follicles)

Multiple hair follicles: Quantity: 0, Percentage of area: 0% (Image: 3D skin cross-section with 0 follicles)

Hair density: Quantity: 20, 42.3414 FU/cm² (Image: 3D skin cross-section with 20 follicles)

Aging Analysis

Forehead Top of the head Left Right Occipital area

Scalp condition

Score: 62

Area: 6.5998, Percentage of area: (Image: 3D skin cross-section with 6.5998 area)

Recommended solutions

Serum: Essence serum is a type of highly concentrated and highly effective skin care product. (Image: Serum bottle)

Hair Growth Serum: Hair growth lotion, as the name suggests, is a liquid skincare product. (Image: Serum bottle)

Hair dye cream: (Image: Cream tube)

Hair Serum: (Image: Serum bottle)

More >

Image Single Comprehensive Microscopic Comparison

Hair Loss Analysis

Aging Analysis

Scheme recommendation

Comprehensive

Score: 0, Quantity: 0, Percentage of area: 0% (Image: 3D skin cross-section)

Product details

Product name: XXX

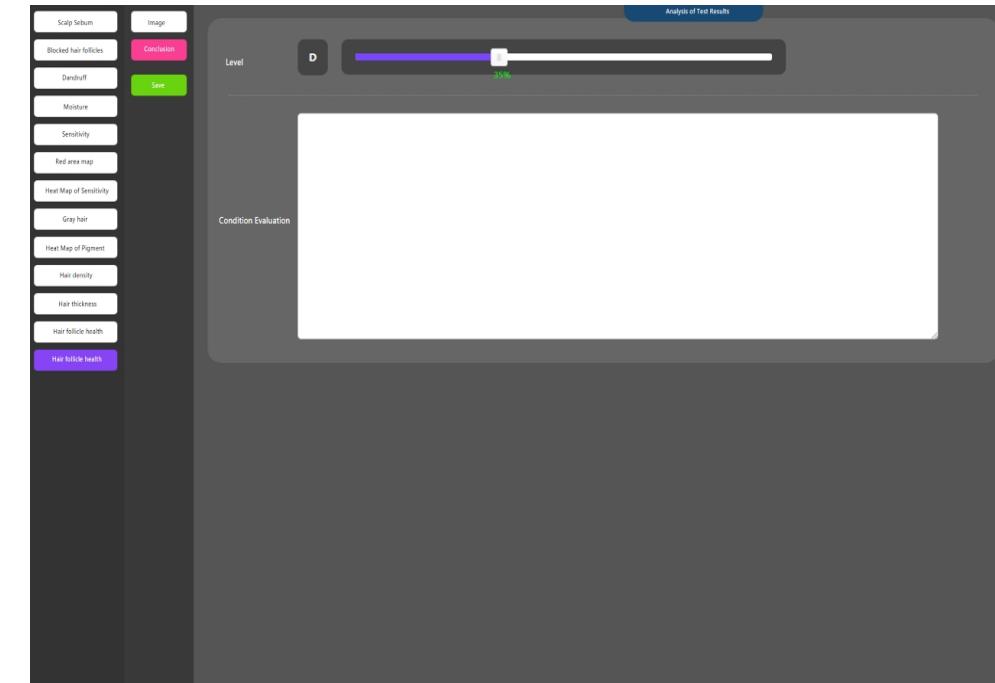
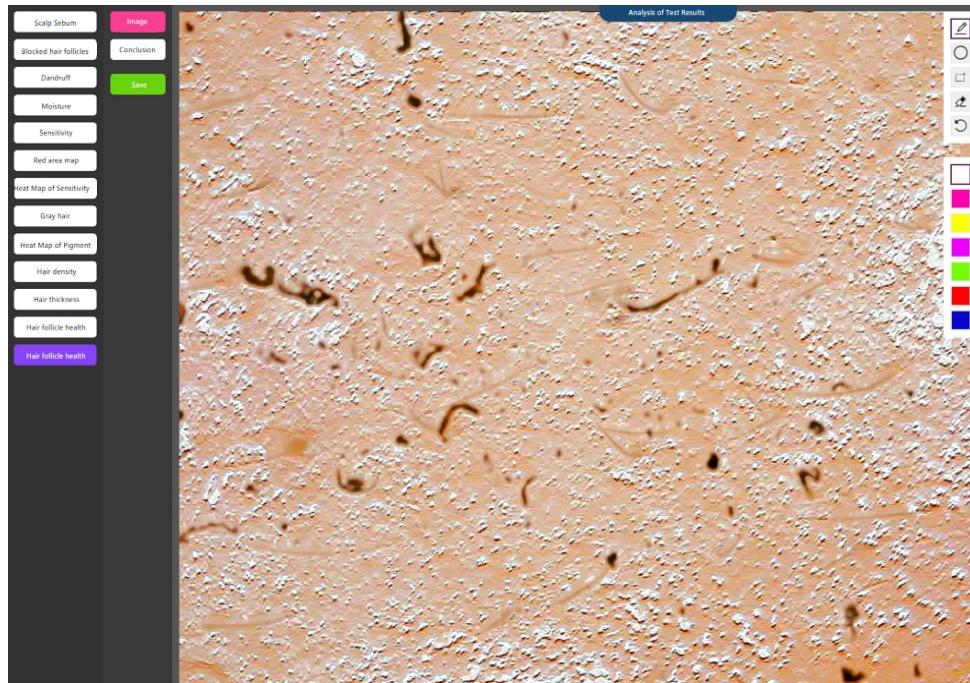
Product description: Deeply nourishes, revives cells, and restores youthful radiance to the skin!

Scan the QR code and view the report on your phone

Notes: The results are used for this analysis only. The organization reserves the right to final interpretation of the results.

Image Single Comprehensive Microscopic Comparison

Three Reporting Modes - Custom Report 4



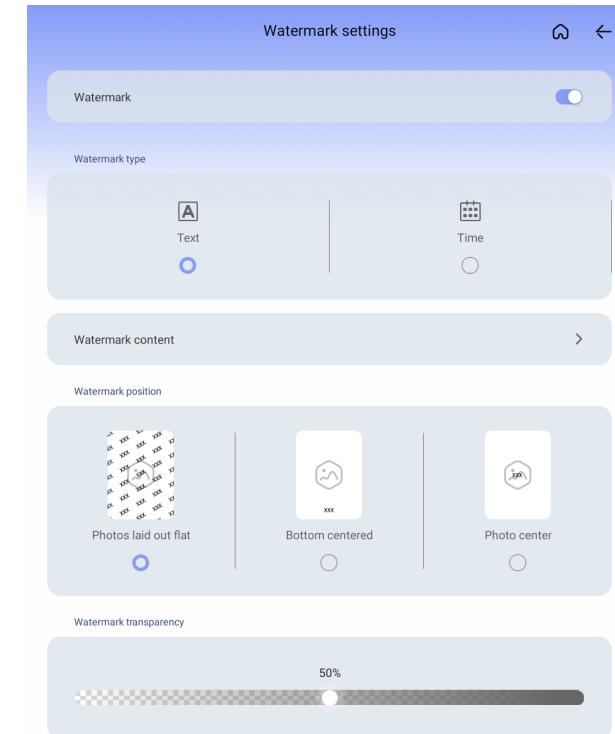
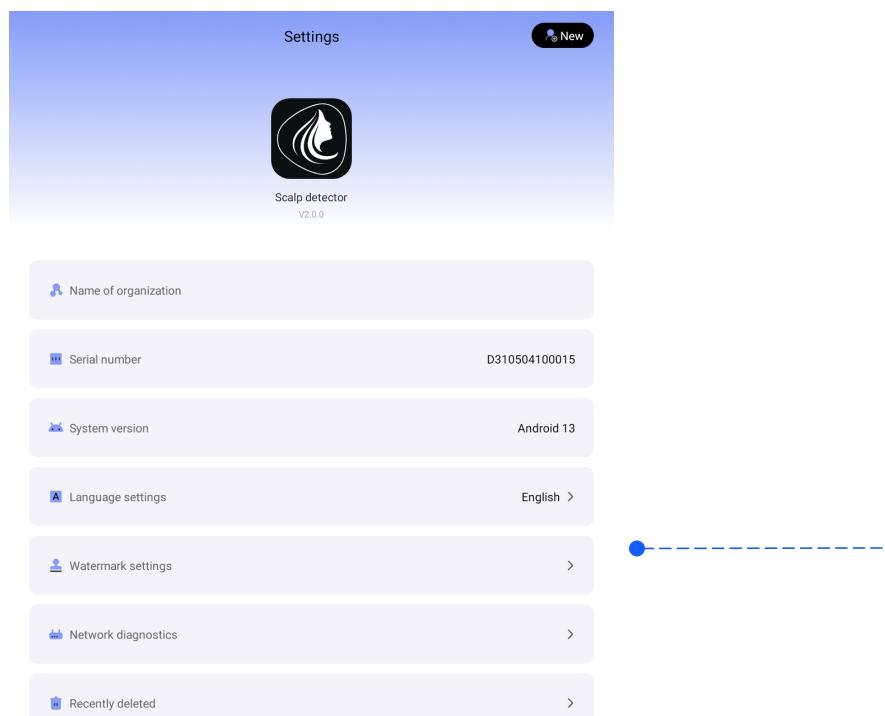
The background allows independent selection of images to be edited for annotation.

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

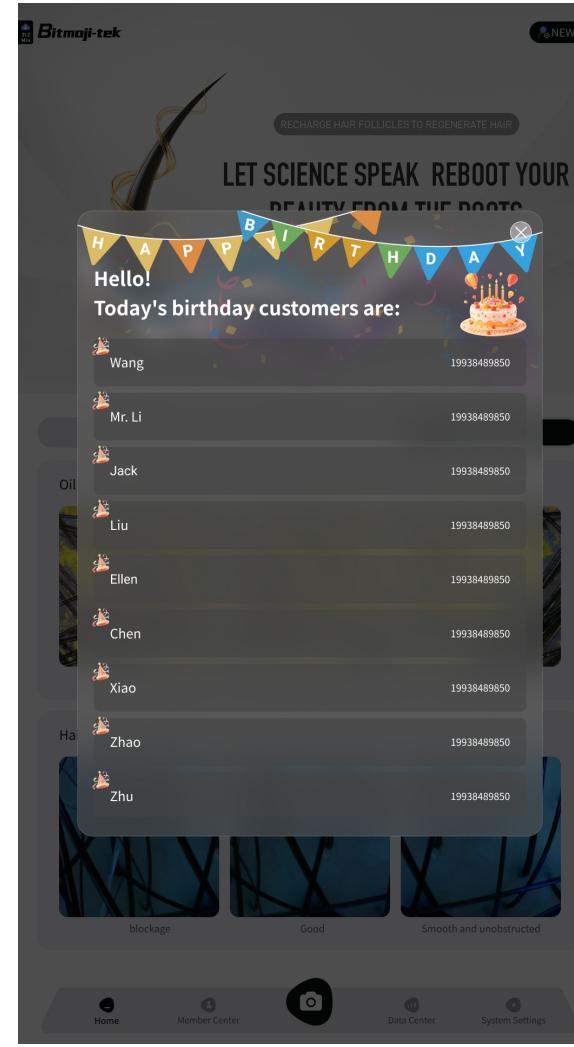
Male Female

Birthday Please select

Contact information Please enter

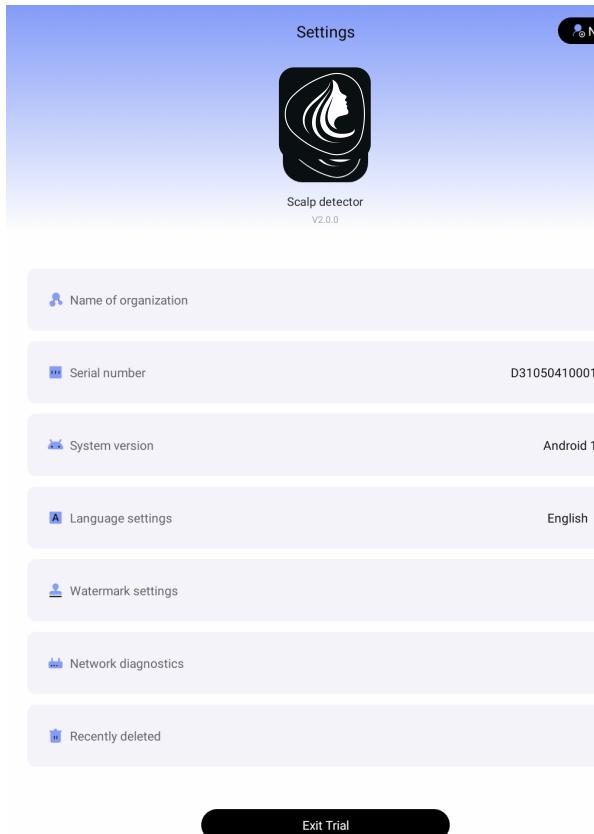
Note 0/200
Please enter

Save



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

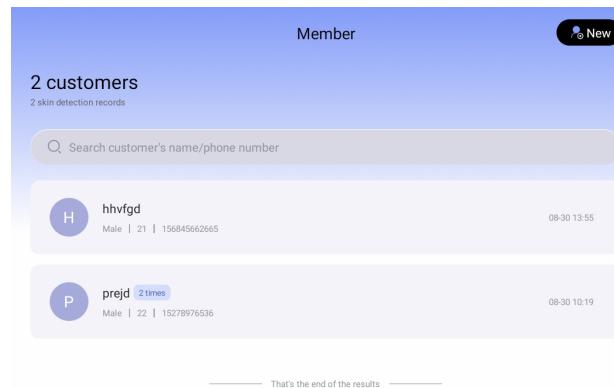
My Devices



Serial number

Language settings

Archives management



History

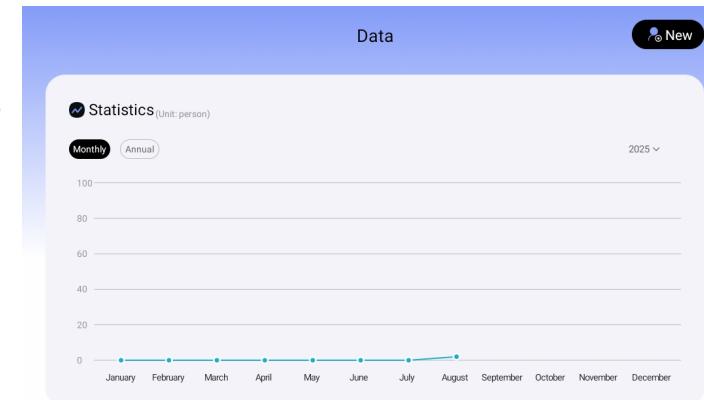
Create a new profile

The form is titled 'Create a new profile'. It includes fields for 'Name' (placeholder 'Please enter'), 'Gender' (radio buttons for 'Male' and 'Female'), 'Birthday' (placeholder 'Please select'), 'Contact information' (placeholder 'Please enter'), and a 'Note' text area (placeholder 'Please enter', 0/200 characters). A 'Save' button is at the bottom.

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.

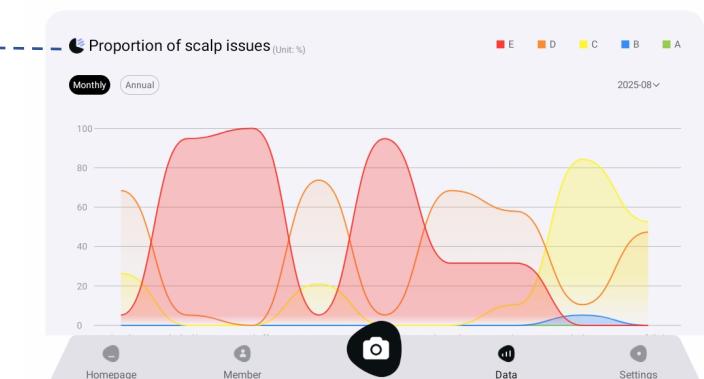


Year can be selected



Age distribution

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



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.

Back-stage management





T3 AI Intelligent Scalp Analyzer

02

HARDWARE PARAMETERS

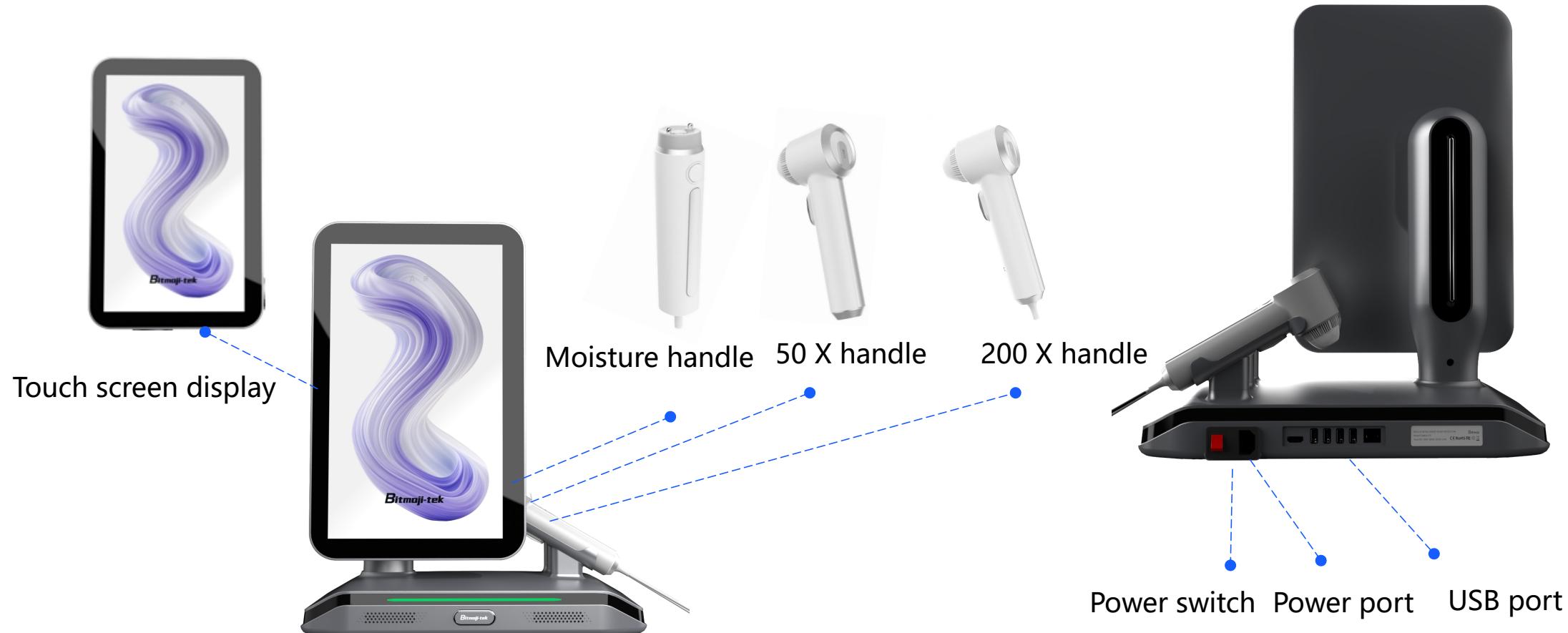
Hardware parameters

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





T3 AI Intelligent Scalp Analyzer

03

FOUR-SPECTRAL
IMAGE ANALYSIS

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:

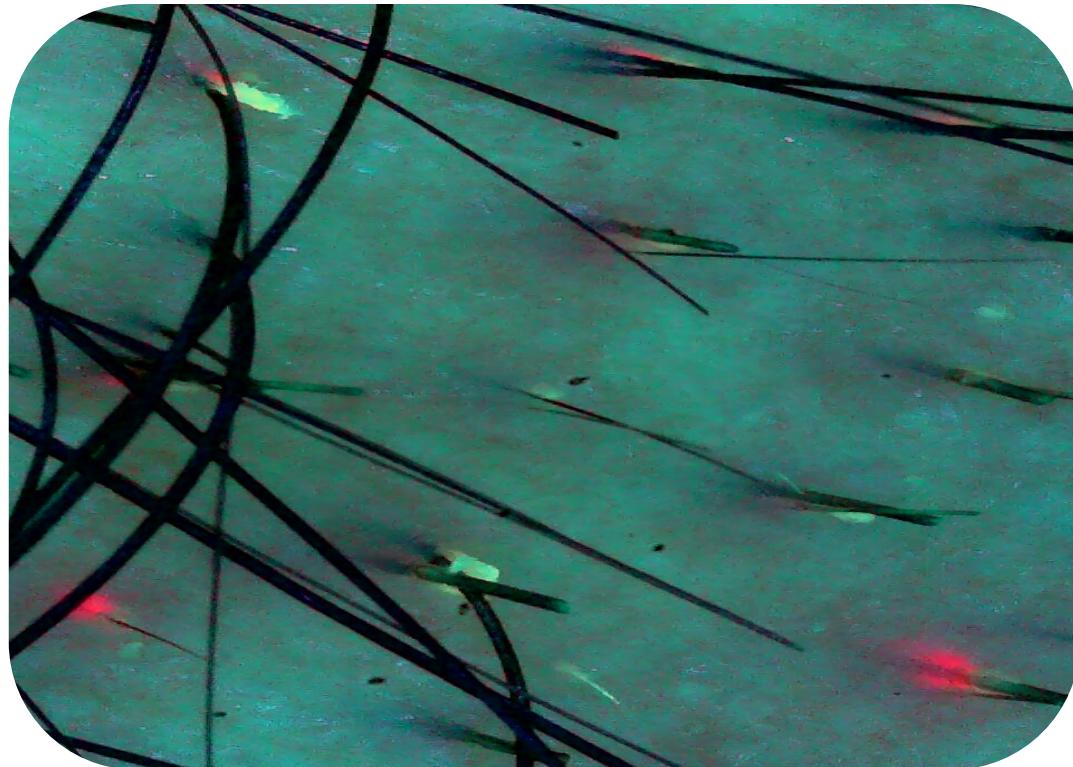
Parallel polarization technology is used to capture images formed by light reflected from the surface (stratum corneum) of the scalp skin entering the camera. It suppresses scattered light beneath the scalp surface, enhances epidermal reflection, and improves the clarity of imaging for skin surface textures. 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.

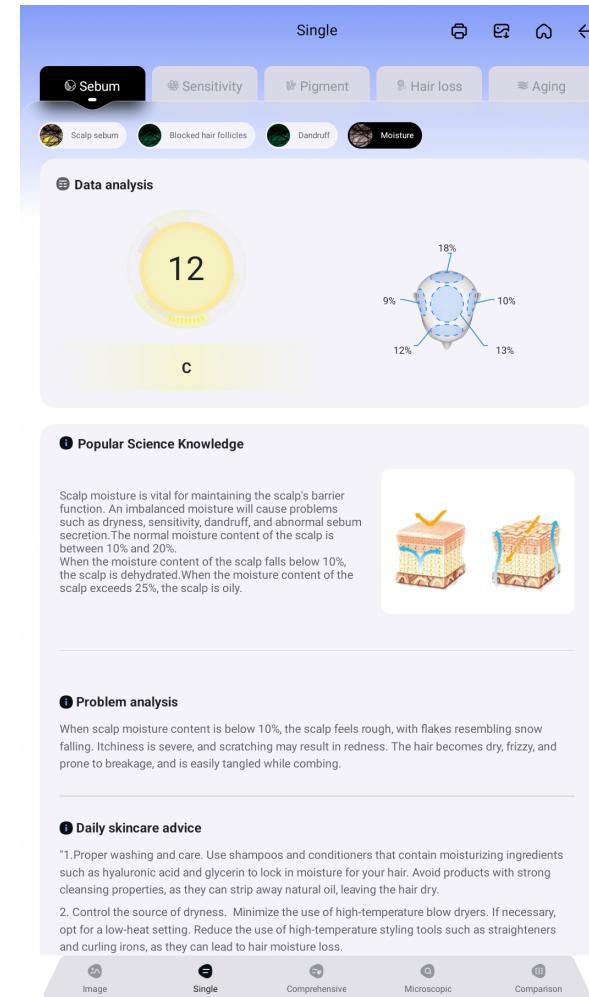
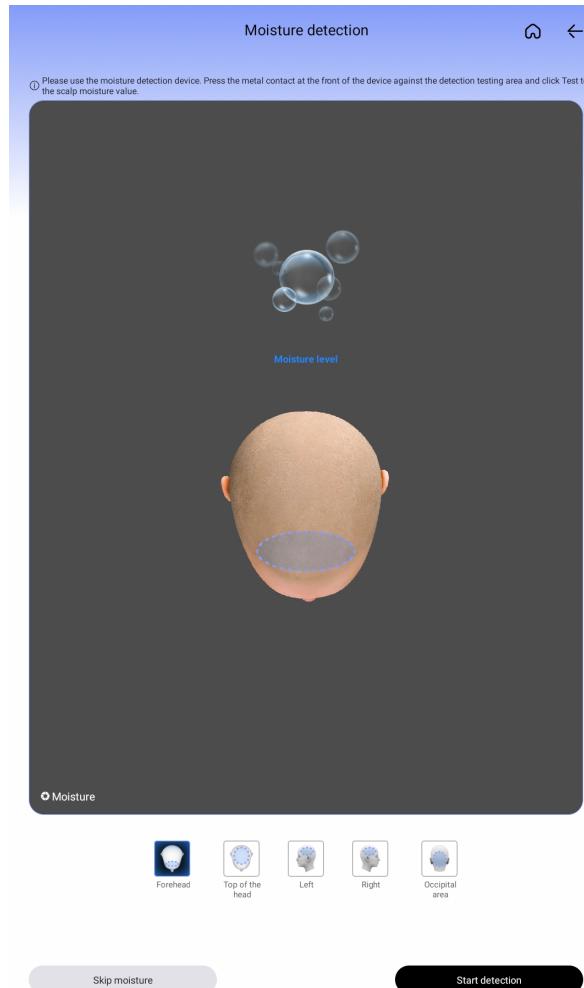


T3 AI Intelligent Scalp Analyzer

04

THIRTEEN
DETECTION
INDICATORS

Thirteen testing indicators - Moisture Report



Data analysis

Popular Science Knowledge

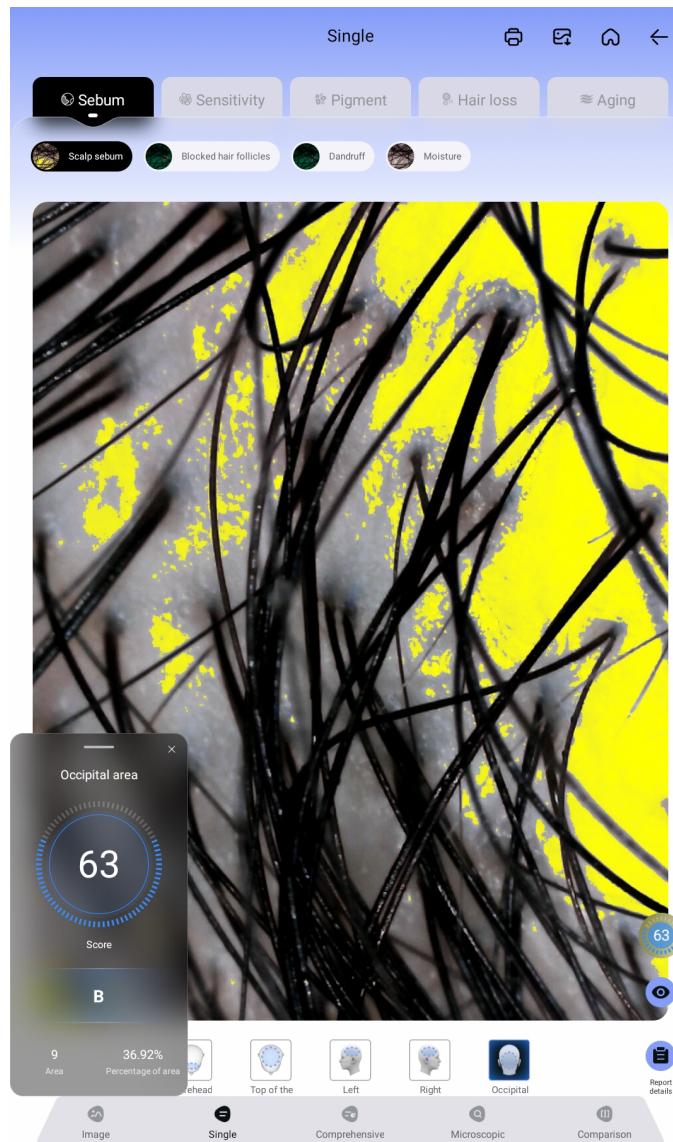
Problem analysis

Daily skincare advice



Handheld scalp moisture detection tool

Thirteen detection indicators

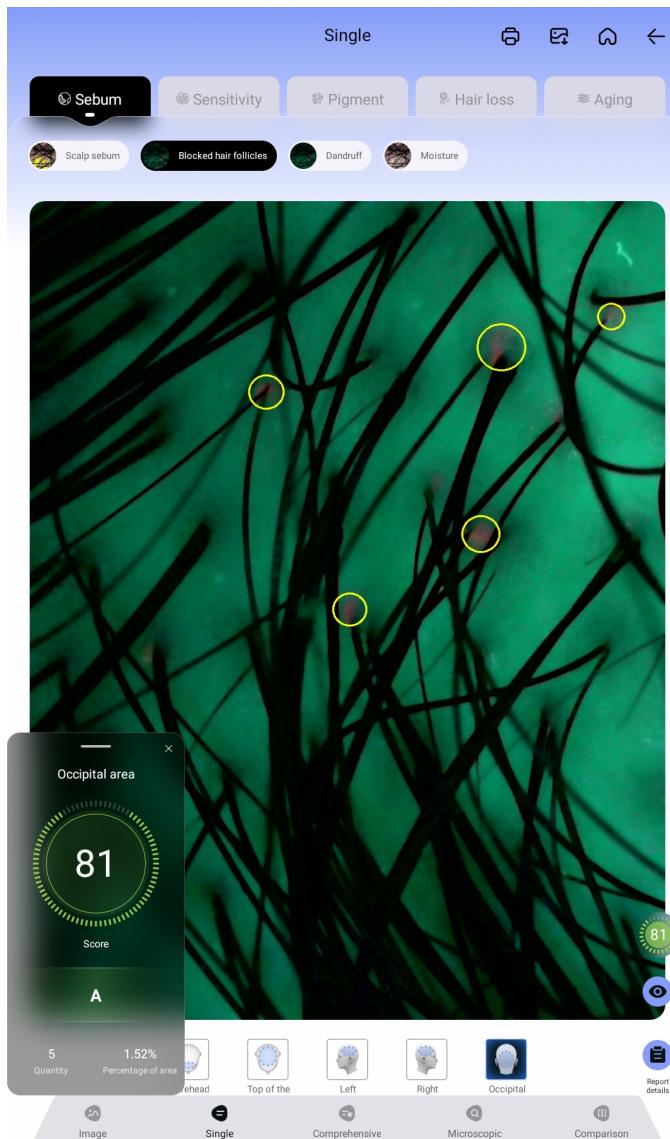


Scalp sebum

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

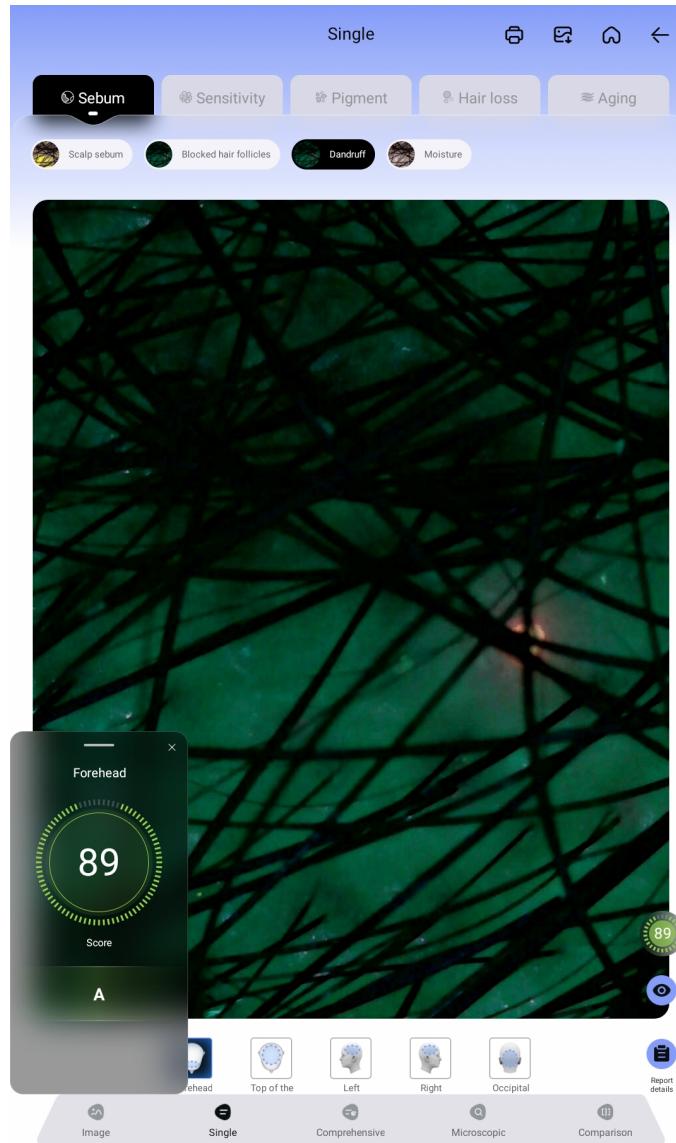


Blocked hair follicles

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

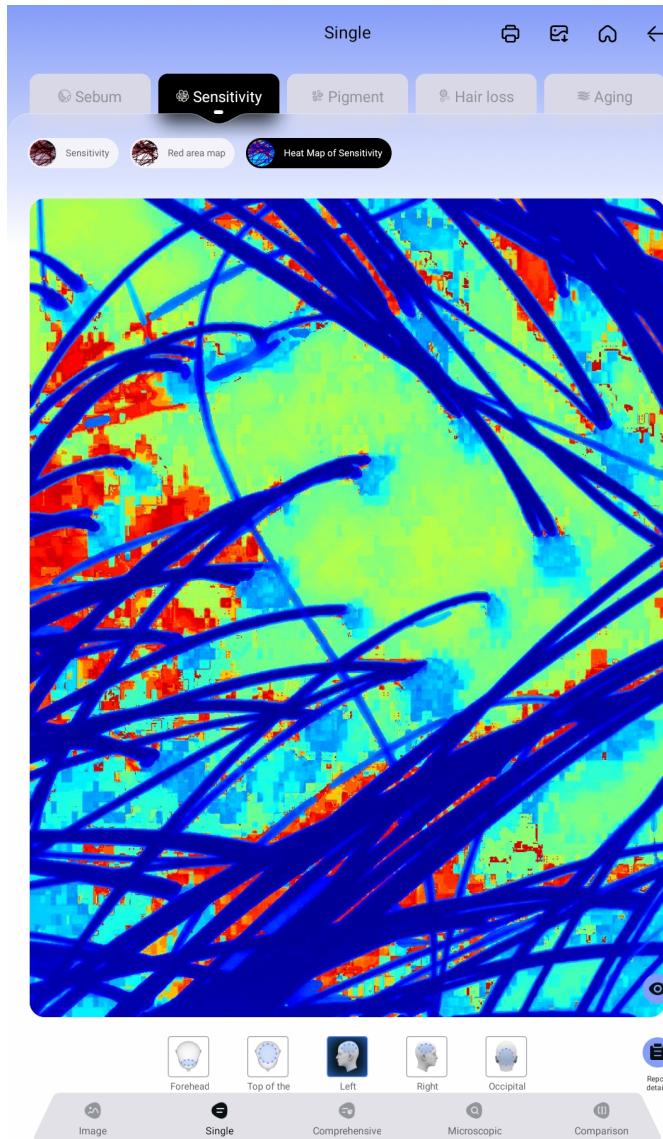


Red area map

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

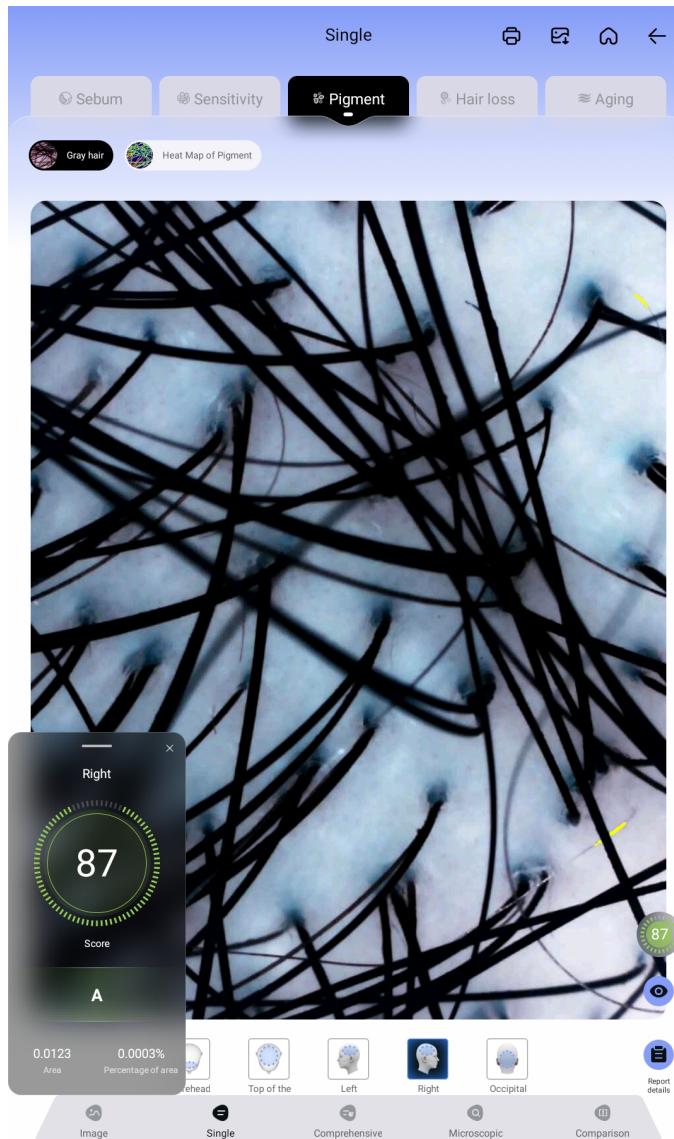


Heat Map of Sensitivity

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

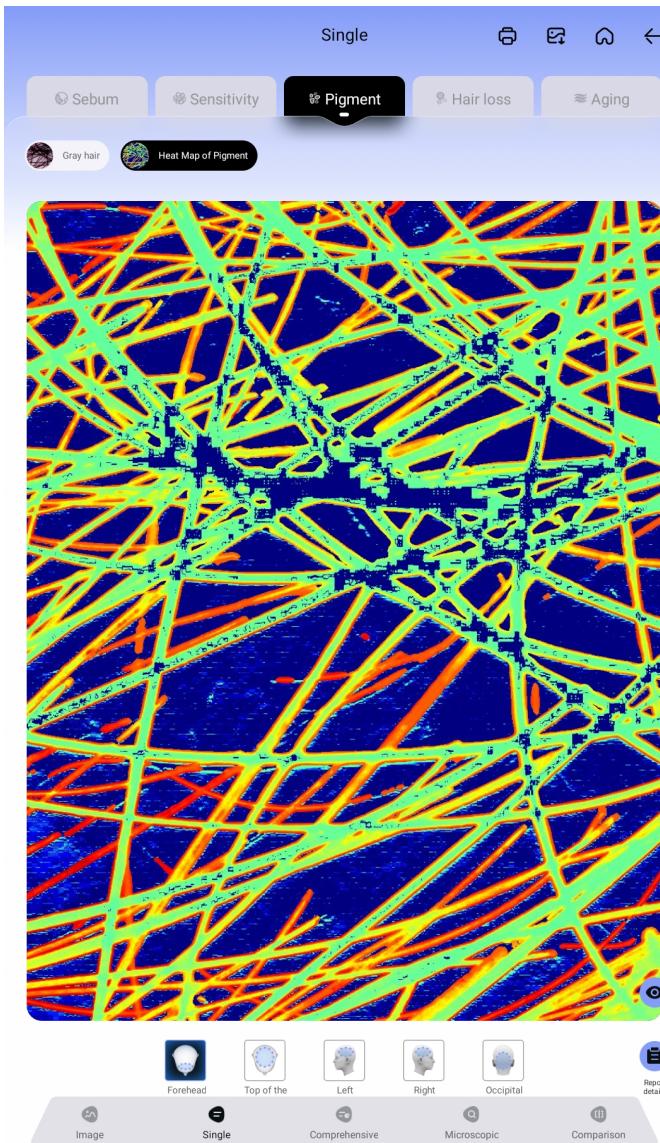


Gray hair

[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

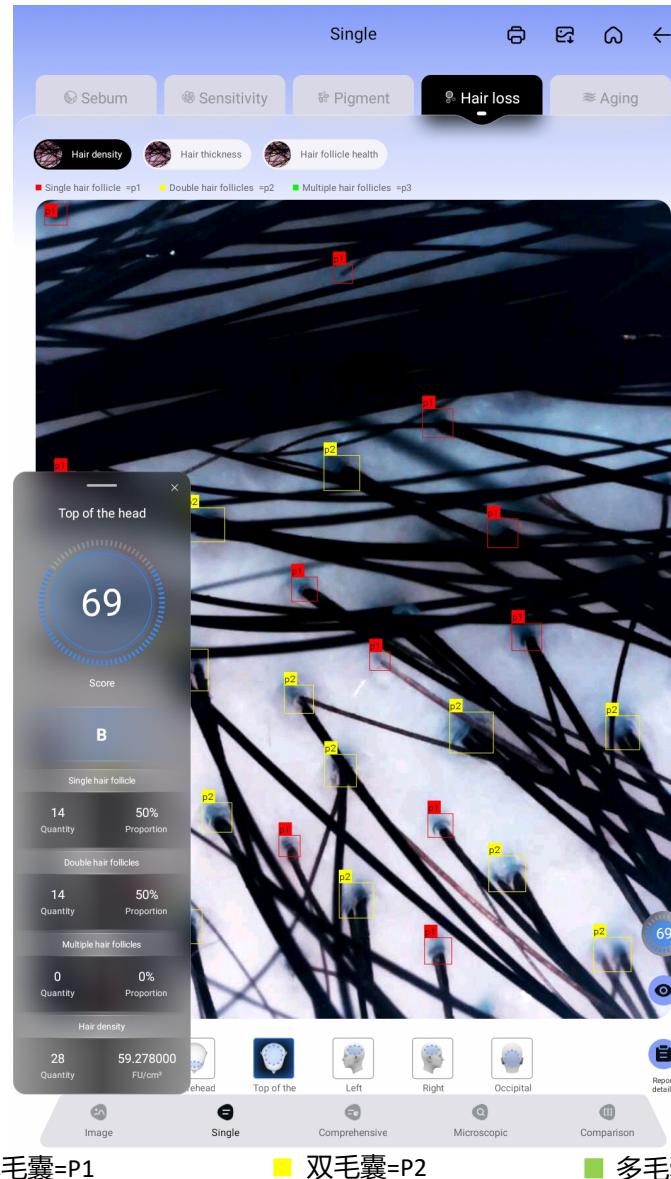


Heat Map of Pigment

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

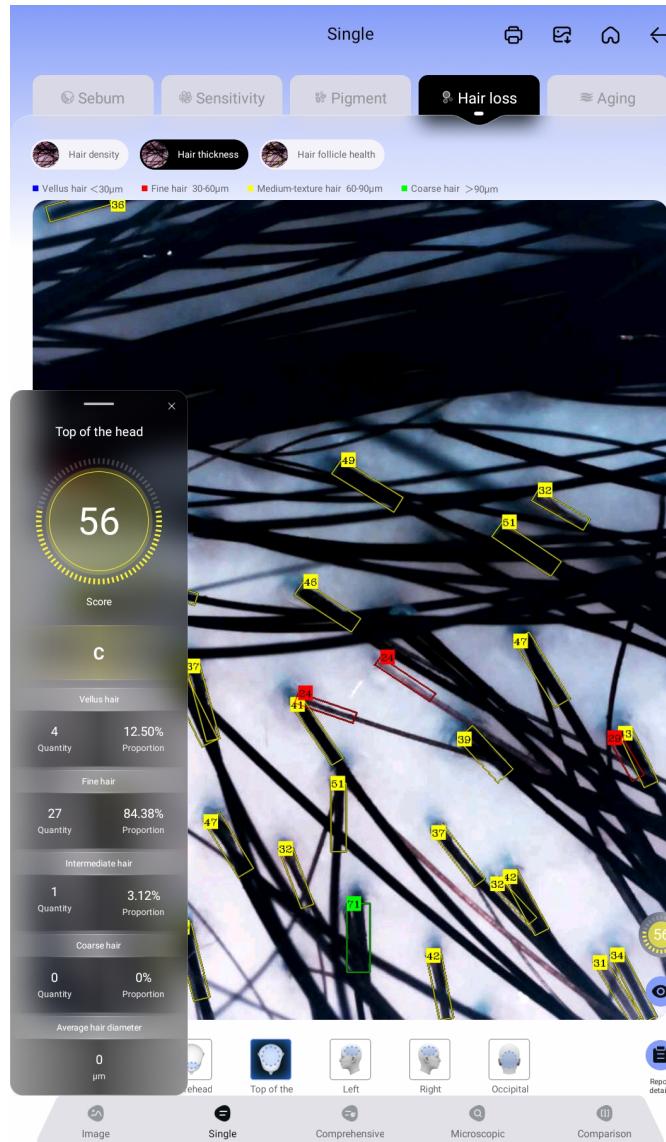


Hair density

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

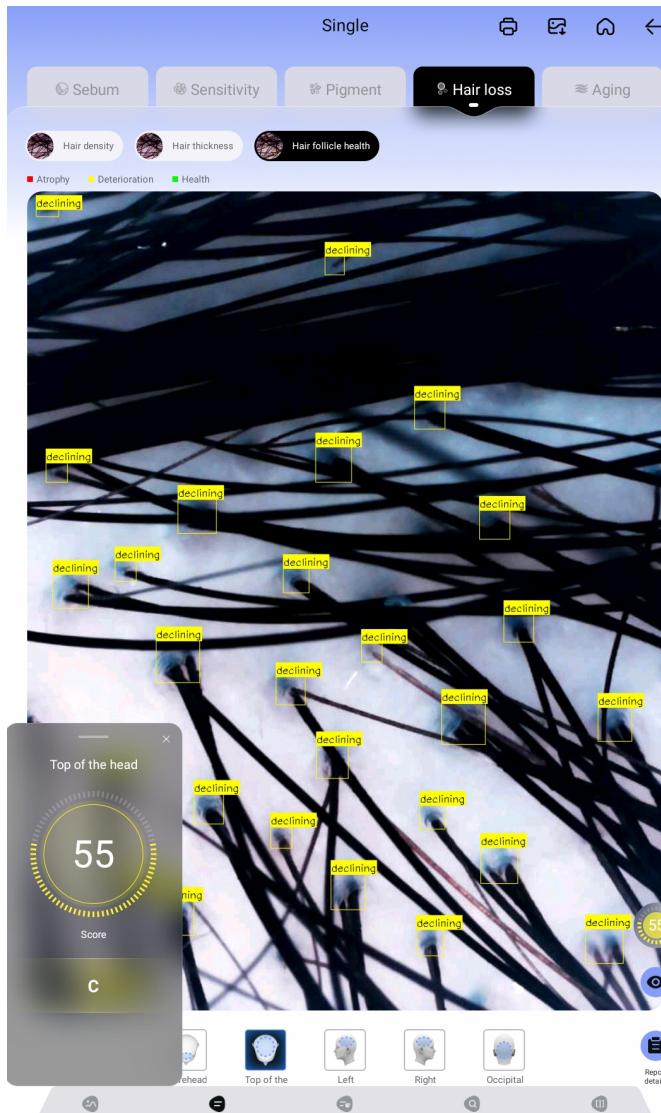


Hair thickness

View analysis

- 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

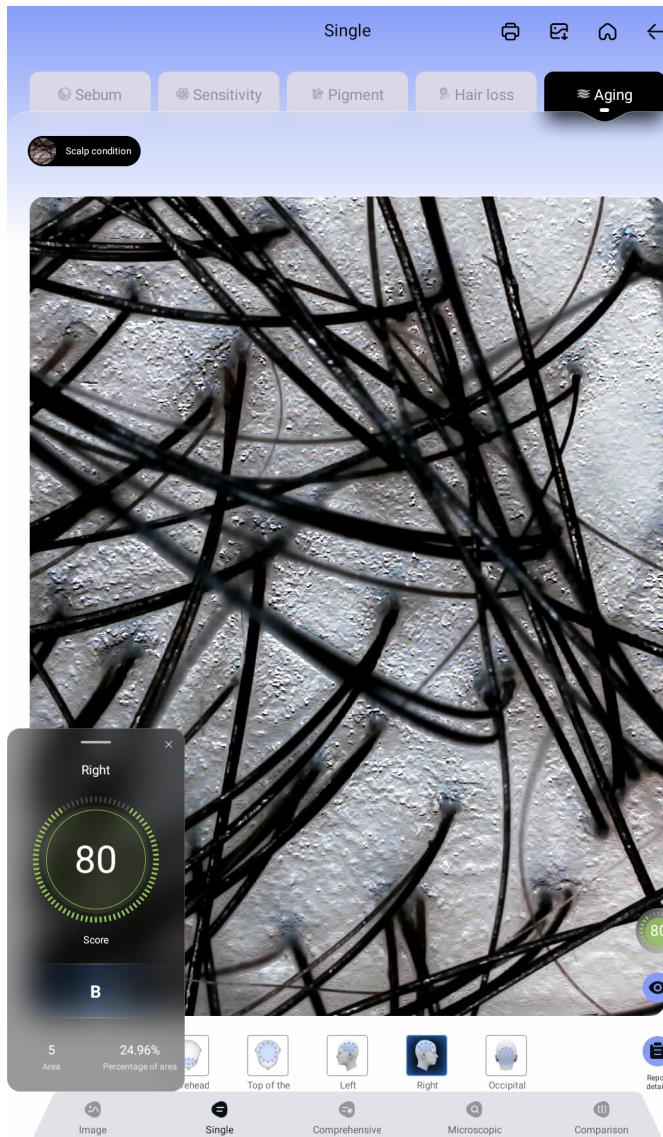
- The algorithm identifies the health status of hair follicle orifices and presents them through rectangular boxes of different colors. Among them, green indicates healthy hair follicles, yellow represents declining hair follicles, and red signifies atrophied hair follicles. The condition of hair follicle 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.

■ Atrophy

■ Deterioration

■ Health

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* 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