Orthodontics TMJ folder Posture

Contents

Design, development and implementation of software and instrumental solutions for clinical and orthodontic evaluation.

Specialists in technologies for posturology and orthodontics with a strong focus on researching state-of-the-art systems.

The development and research have been carried out by the Microlab staff for over 30 years with the satisfaction of our customers

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version 1.0   revision date: 09.2021

Our solutions

3. TMJ evaliation

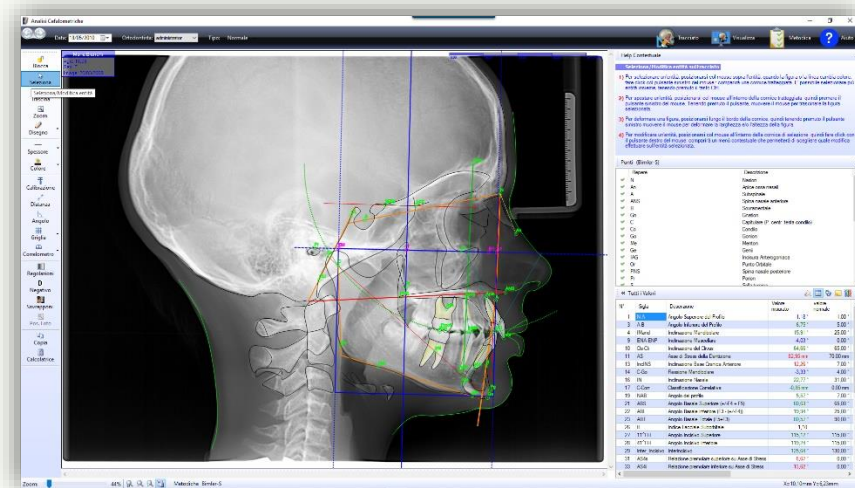The file is made up of distinct and organized sections following a patient visit protocol according to the ROCABADO method

1. Orthodontics

Thanks to the graphic interface, OrthoTP allows the rapid creation of a precise and accurate cephalometric trace with extreme simplicity.

More than 30 methods are integrated in the various projections, Lateral, AP, PA, Axial, Panoramic, Postural, Models

4. Postural evaluation

Postural evaluation folder.

2. Space analysis and dental VTO

Section in which it is calculated automatically and manual the space available according to the school of Boston with indication of the displacement vectors and anchor.
Final calculation of the dental VTO for treatment purposes e the choice of the orthodontic device
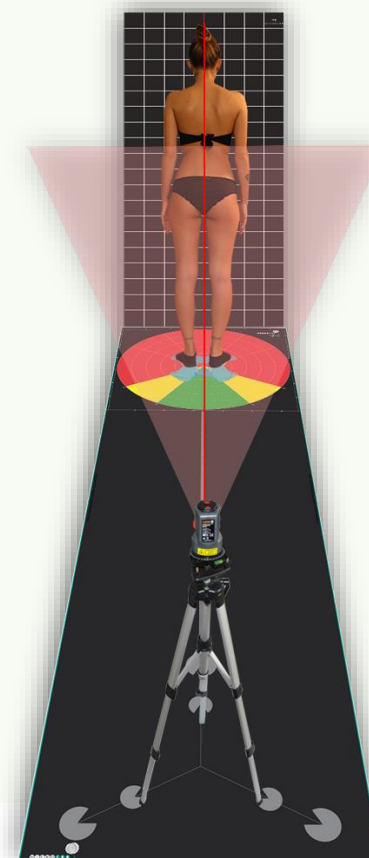
OrthoTP Basic modules

OrthoTP® is the new software solution in the medical-dental field developed by a team of technical and clinical experts. The simplicity of the interface, the completeness of the tools, make OrthoTP the most complete and flexible program existing on the national and international market.
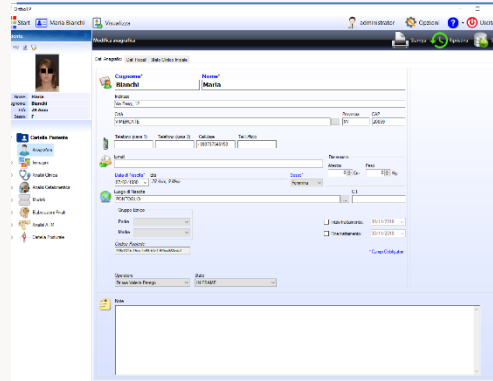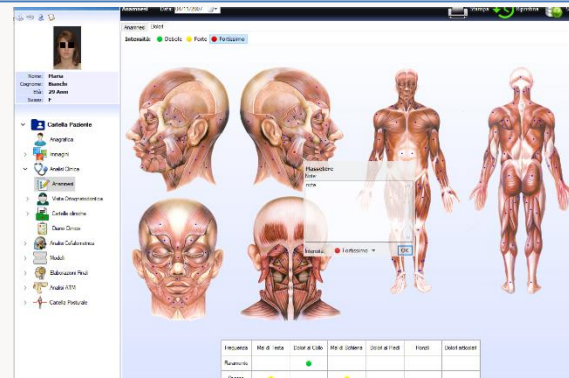
Patient registry
Personal data sheet for the collection of personal and fiscal data of the patient
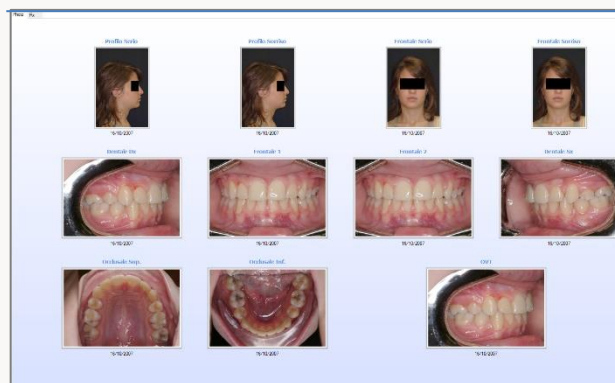
History and pains
Orthodontic history.
The second section of the anamnesis is that of "Muscle Pain" where it is possible to insert pain points (VAS).

Images and Status
This section collects all the patient's images, the statuses collect the photographic and radiographic information represented according to the standards

Head examination
Here are the summary graphics of the face, of the mandibular opening and closing movement, of the position of the hyoid and morphology of the tongue and elements of the orthodontic check-up
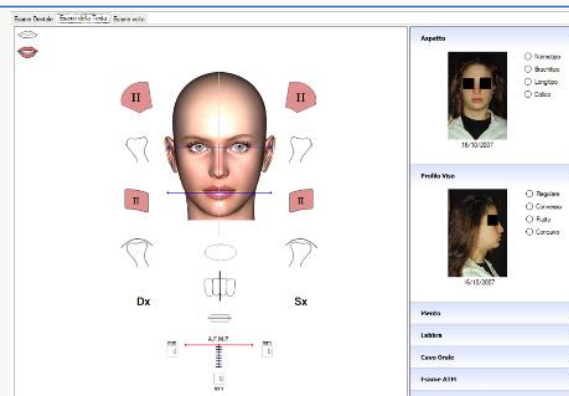
Dental examination
Dental physical examination, type of dentition, dental and skeletal classes, periodontal situation and hygiene

### Facial morphology examination
The facial analysis module allows you to quickly and accurately evaluate the patient's IR and RE side, as well as the biotype

Cephalometric trace
Thanks to the graphic interface, OrthoTP allows the rapid creation of a precise and accurate cephalometric trace with extreme simplicity.
More than 30 methods are integrated in the various projections, Lateral, AP, PA, Axial, Panoramic, etc.
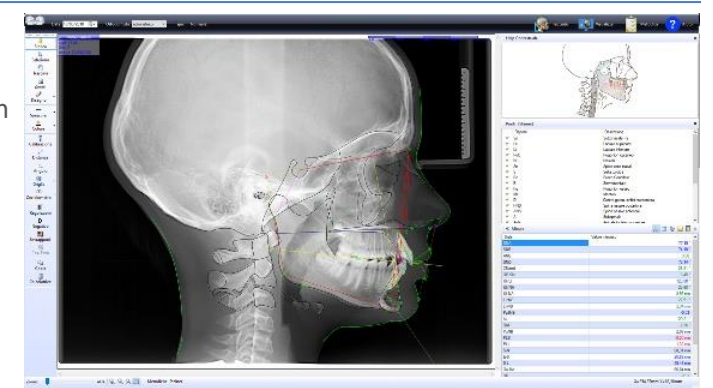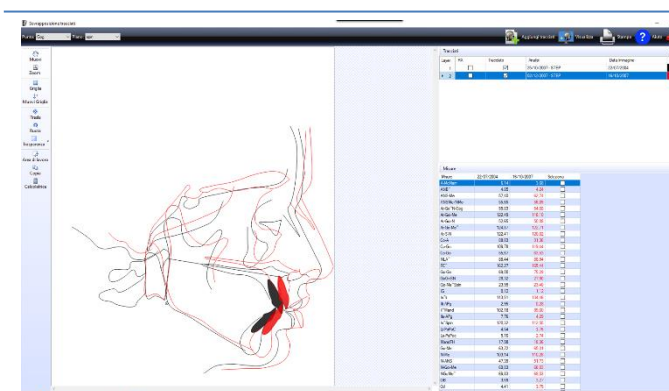
Other features
Superimposition of cephalometric traces
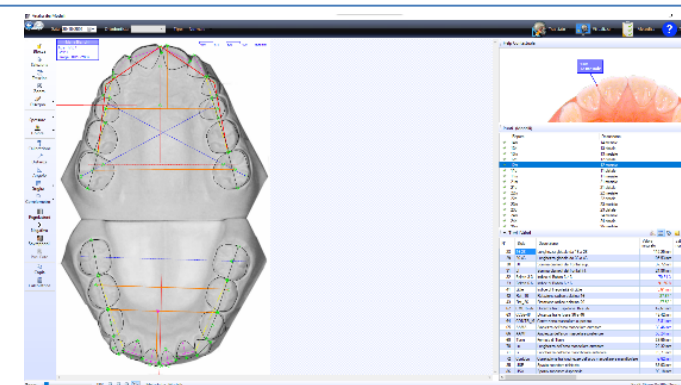Grid Overlay
Bimler Correlometer / Goniometer overlay
Normogram, overlay with patient photo

Model analysis
Analysis of models in occlusion which includes:
- Metric analysis of the arches
- Bolton index
- Little's irregularity index
- Peck's index
- Calculation of Pont
- Rotation of the molars
- Formula of Tonn
- Evaluation of the maxillary contraction

Dental VTO and biomechanical synthesis

## vers. PRO – FULL - ADV

Space analysis and dental VTO

Section in which the available space is calculated automatically and manually according to the Boston school with indication of the displacement and anchoring vectors. The operator can freely introduce other parameters such as stripping, lee way, expansion and distalization for the final calculation of the dental VTO for the purposes of treatment and choice of the orthodontic device.

Biomechanical synthesis

Biomechanical synthesis, based on an inferential algorithm (developed by Microlab and Experts of the Board) and comparison with clinical cases (over 800) without relapses, provides guidelines for therapeutic choice.
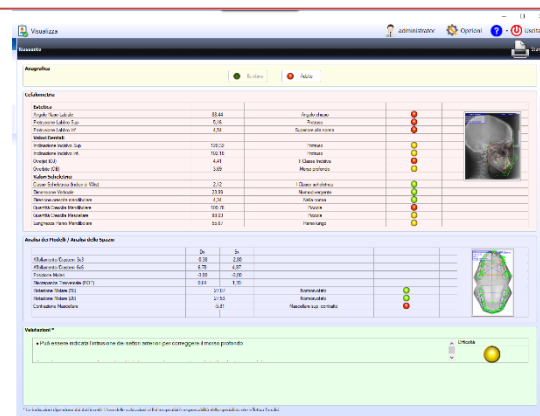

Report
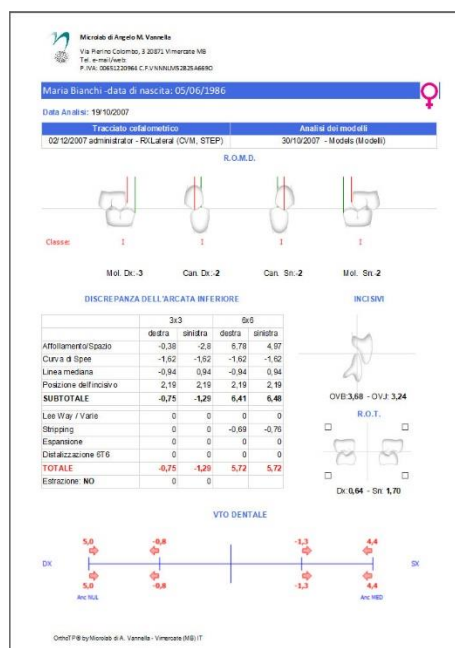
TMJ evaluation folder

The file is divided into distinct sections and organized following a patient visit protocol, following step-by-step all the steps of the TMJ assessment

vers. FULL - ADV


Medical history and Muscle palpation

The history according to Rocabado is essential for the investigation of TMJ dysfunctions

In the section of the palpation of the muscles it is possible to record both the evoked and reported pains and the relative intensity according to the Rocabado language graphically, through a colored marker according to the intensity and an associated "post-It" for additional notes for each individual point. The visualization of the inserted pain points has a double vision: graphic and tabular for a more immediate interpretation. The section allows you to record ligament laxity, the clinical examination relating to mandibular movements, the situation of the facial muscles, etc..
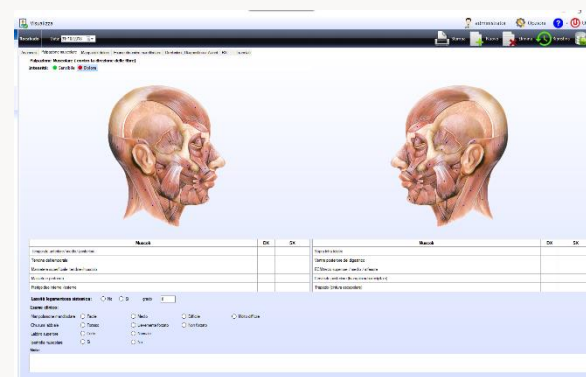
Pain map and automatic synthesis

This section is the heart of the folder in which it is possible to record what is detected during the palpation of the eight pain points defined by Rocabado and according to a specific technique taught by him. The insertion can be performed both on the image and in the table below, automatically producing the corresponding clinical meaning which is displayed in the appropriate notes field in which the final diagnosis can be extended by the clinician.
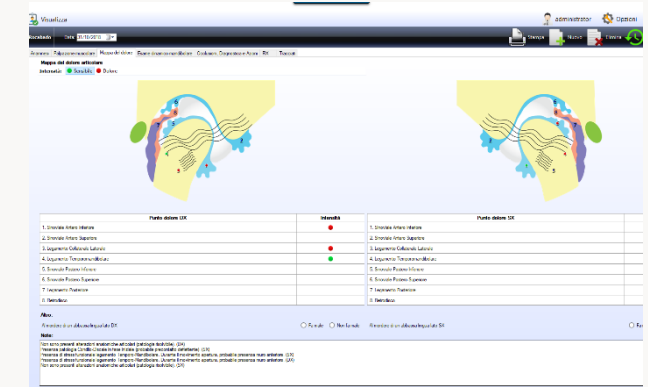

Dynamic mandibular examination

In this section, the extent of the protrusive, left and right lateral movements and of the maximum opening can be entered on a specific millimeter graph, as well as other clinical information of the dynamics performed at low pressure at the level of the gonic angle. The program calculates the ratio between the laterality and the maximum opening which in physiology is ¼.
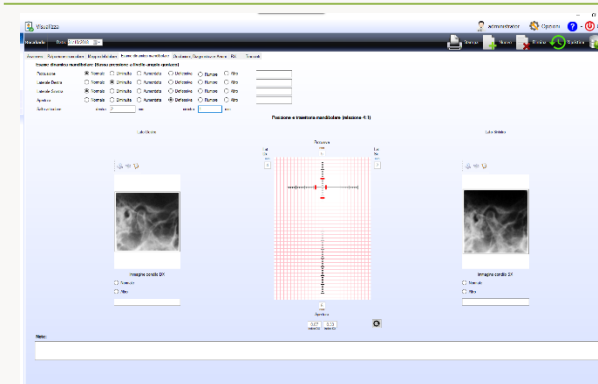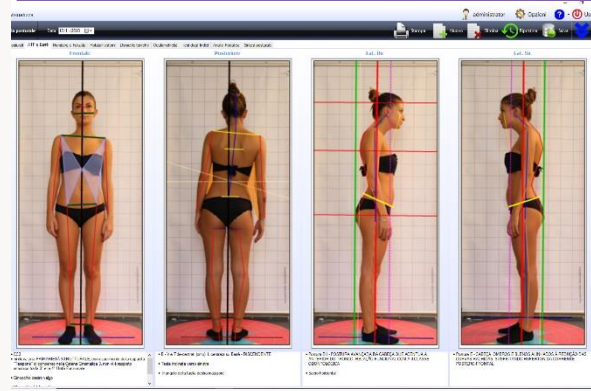
Radiographs and cephalometric tracings

This section includes all the radiographs in the projections useful for orthodontic evaluations and the Folder of the cephalometric exams performed on the patient in the Lateral, Frontal, Axial projections.
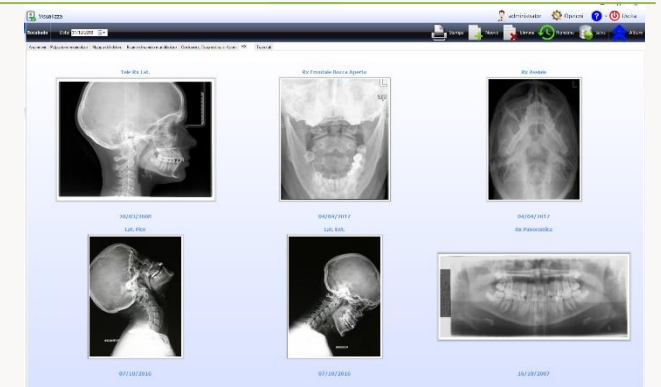
Postural Folder (v. ADV)

The chart goes far beyond the classic postural assessment programs which are limited to objectifying the patient's static posture with the Barrè vertical. In fact, OrthoTP-Postural has been enriched with all the basic tests, for a complete evaluation of postural reflexes, starting from the photographic analysis in the three planes of space and continuing with the evaluations on a prognostic basis and ending with the interrogation of the answers at organ. The file is essential for the clinician to compile the data of the visit, allowing the synthesis of the postural balance in which the buffering capacity of the system and the remodulation indications are highlighted.

Oculomotricity

This section records all the data relating to the oculomotricity test in the 6 diagnostic positions, as well as the objectification of the dominant eye.

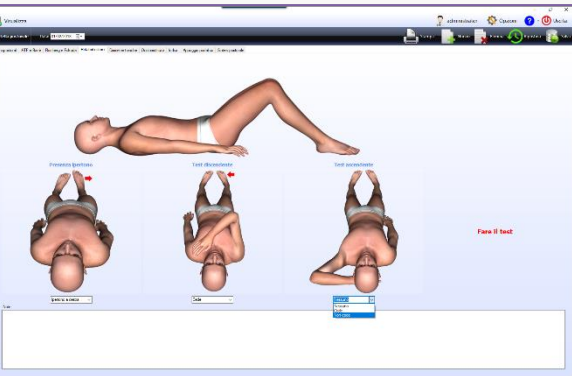## Postural photographic analysis

POSTURAL ANALYSIS

Front: Evaluation of the Harmony of the Postural Tone;

Rear: Evaluation of Barrè and other elements such as the triangles of the size, the position of the upper and lower marks for the analysis of the AREA attractor.

Lateral right and left: Evaluation of Lateral Barrè that correlates breech support to posture and to determine the position of the scapular plane;

Index test

The index test is a neuro-physiological test, the tone of the right upper limb (longer or shorter) is used as a starting point, called the basic test, then proceeds by "interrogating" the body districts. All this is facilitated by a graphic protocol and an aid for the selection of the response proposed by the software.

Romberg and Fukuda test

The Romberg and Fukuda tests are the first two evaluations proposed in the clinical test sequence. The graphic objectification of the tests helps the clinician in assessing the patient's postural status thanks to the immediacy of the information provided

Foot evaluation

The analysis of the breech support and the hindfoot is carried out according to the internationally validated Postural Podalic Index (PPI) method with generation of the diagnostic synthesis and digital Podogram
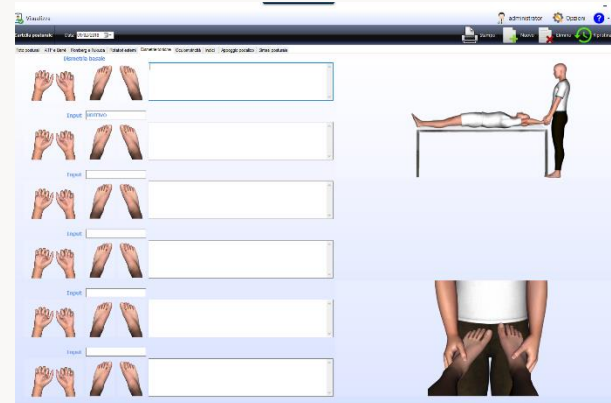
External rotator test

This test is used to assess the tone of the external rotator muscles of the lower limbs for causal research of an ascending, descending or mixed type using the limb in hypertonus as a reference

Synthesis and correlations

This section provides a summary of the assessments performed and related to the foot support with an indication of the buffer capacity of the system.
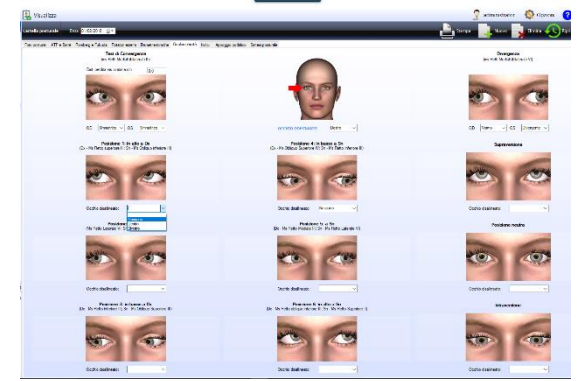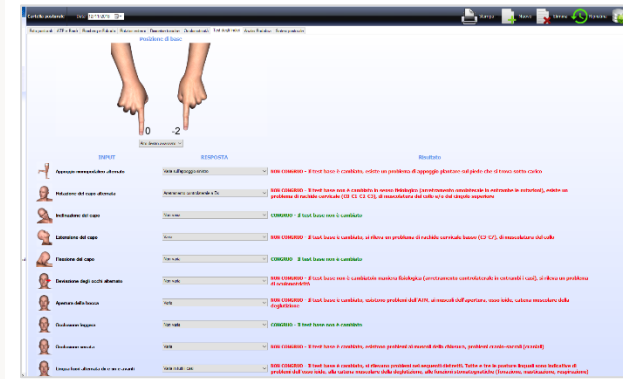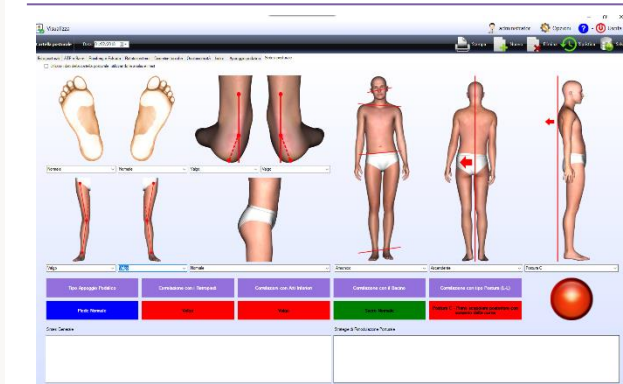
Test of dysmetria

The objectification of the discrepancies starts from the recording of the basal situation and gradually the patient's evaluation with different inputs chosen by the clinician. Next to each test we find a large free notes field

Photographic comparisons

The comparisons section allows you to view a comparison between the various photographic analyzes in the four projections, generating a video that shows the patient's postural change.
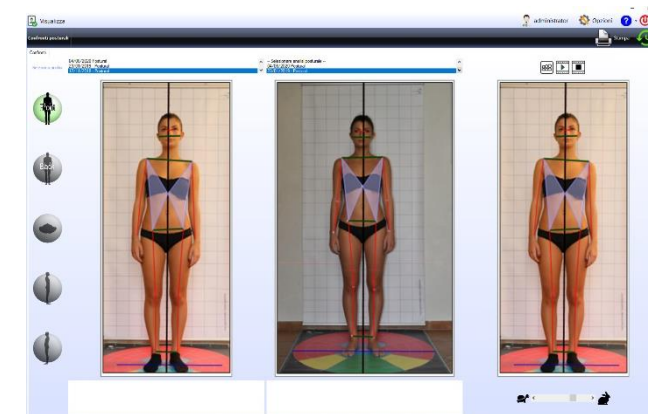
Optional modules and methods

Planas chalcography

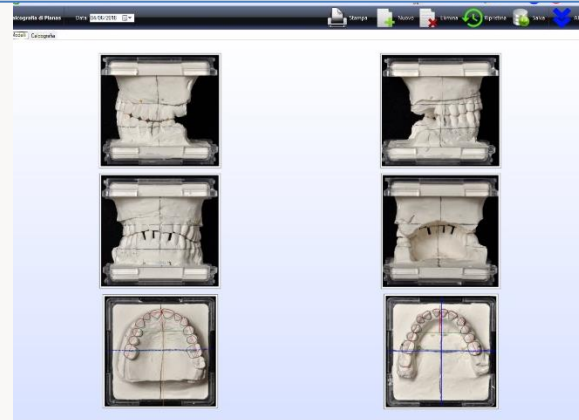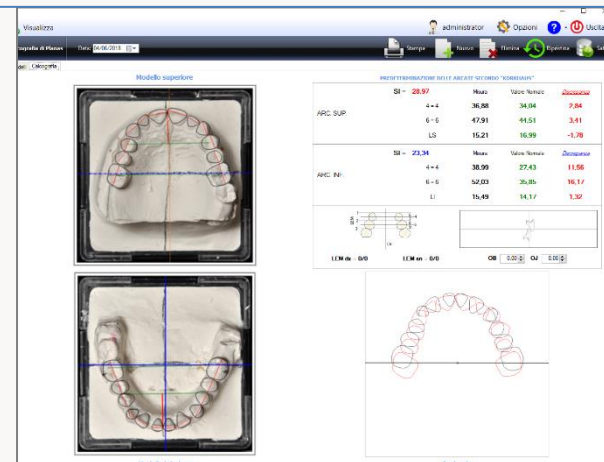### Photo folder of models

Complete photographic status with the six photographic projections for the evaluation of the models according to Planas

Chalcography and analysis

Automatic calculation of discrepancies according to Korkhaus, Occlusogram, calculation of the position of the LEMs


Stampa

Floating Norm

Thanks to the contribution of the studies of Dr. T. Baccetti, L. Franchi and Prof.sa Tollaro and to the direct collaboration with Dr. E. Zaffuto, Microlab has developed in OrthoTP an instrument for the automatic calculation of the "Floating Norms "According to the two phases of deciduous and mixed dentition
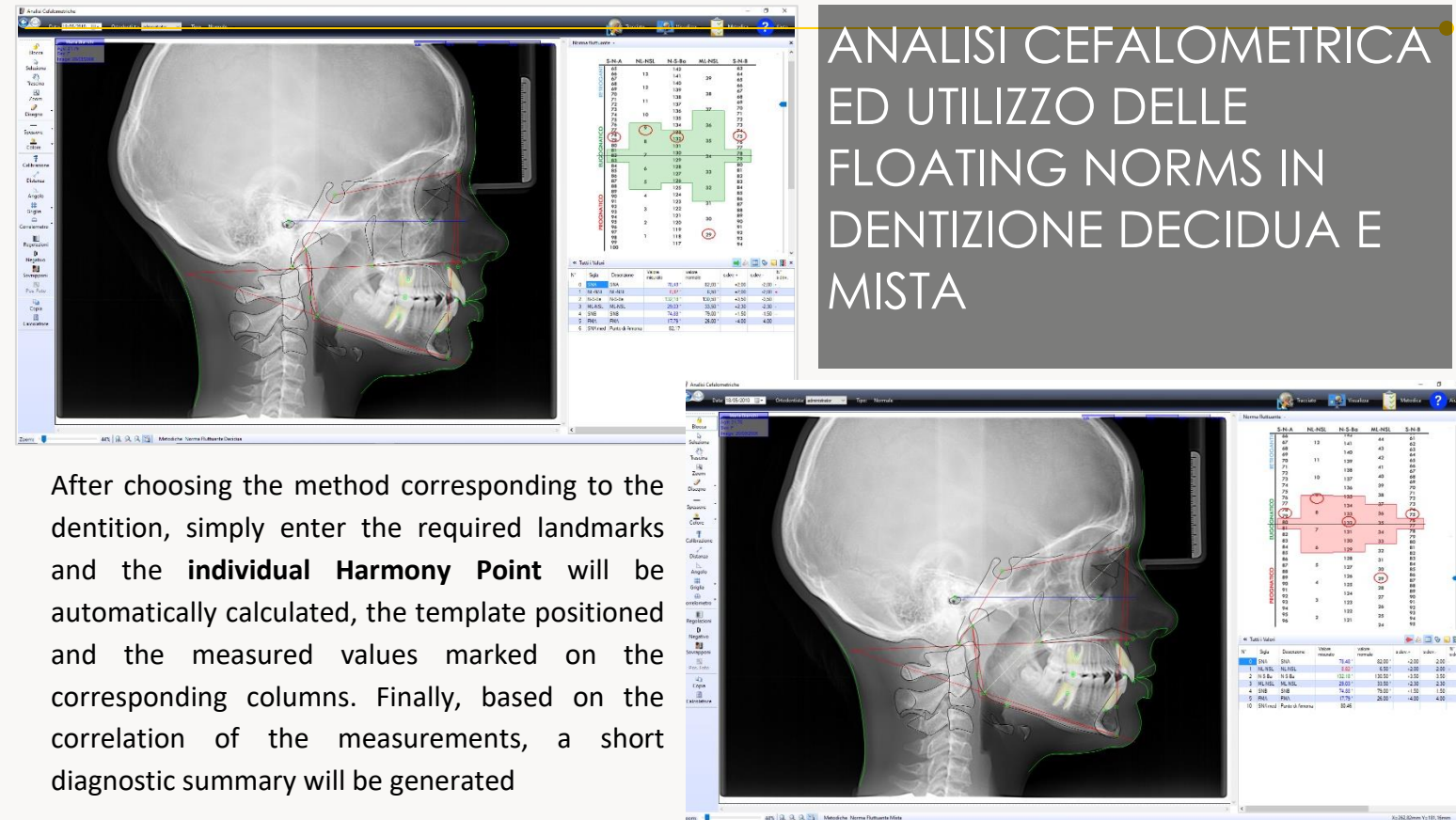
ANALISI CEFALOMETRICA ED UTILIZZO DELLE FLOATING NORMS IN DENTIZIONE DECIDUA E MISTA

After choosing the method corresponding to the dentition, simply enter the required landmarks and the **individual Harmony Point** will be automatically calculated, the template positioned and the measured values marked on the corresponding columns. Finally, based on the correlation of the measurements, a short diagnostic summary will be generated
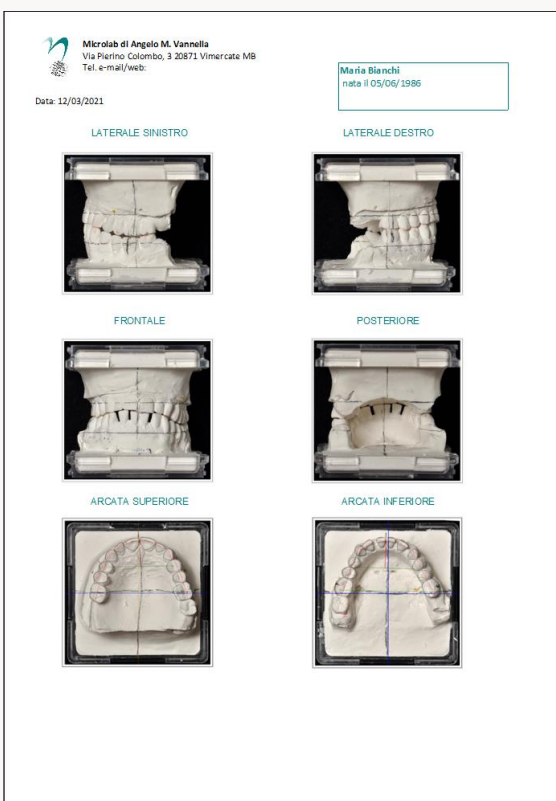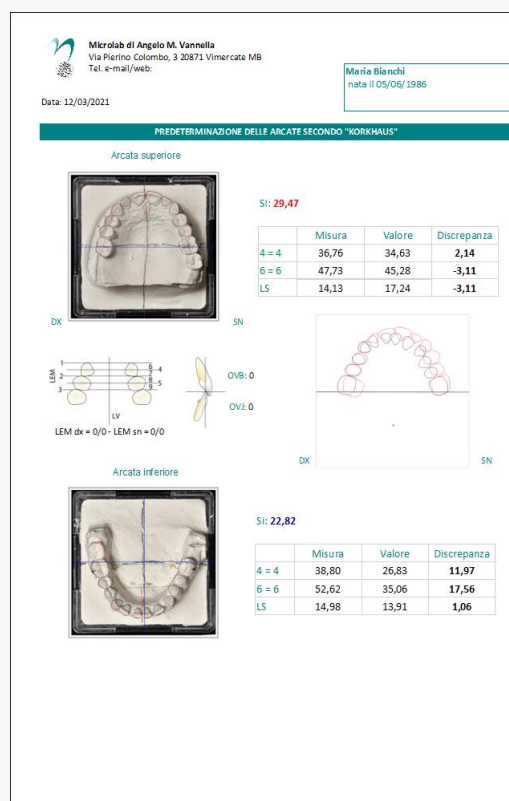
Bimler ORIGINAL

The cephalometric module called "**Bimler Original**" was developed thanks to the experience gained during the many courses with Prof. Wilma Simoes and with the direct collaboration of Prof. Barbara Bimler, (daughter of Dr. Hans Peter Bimler) with the which was recently organized a Theoretical / Practical course and during which the ORIGINAL clinical material was made available.
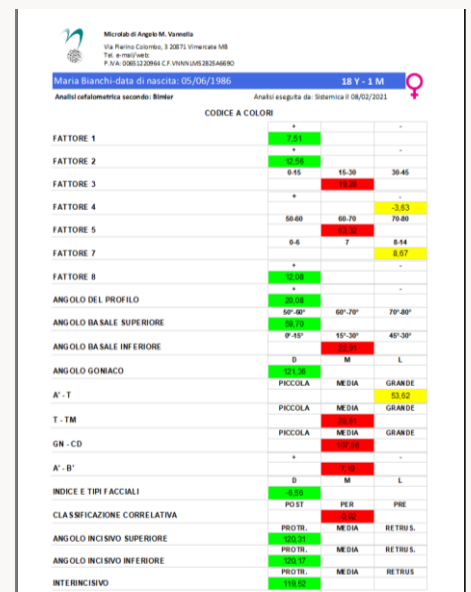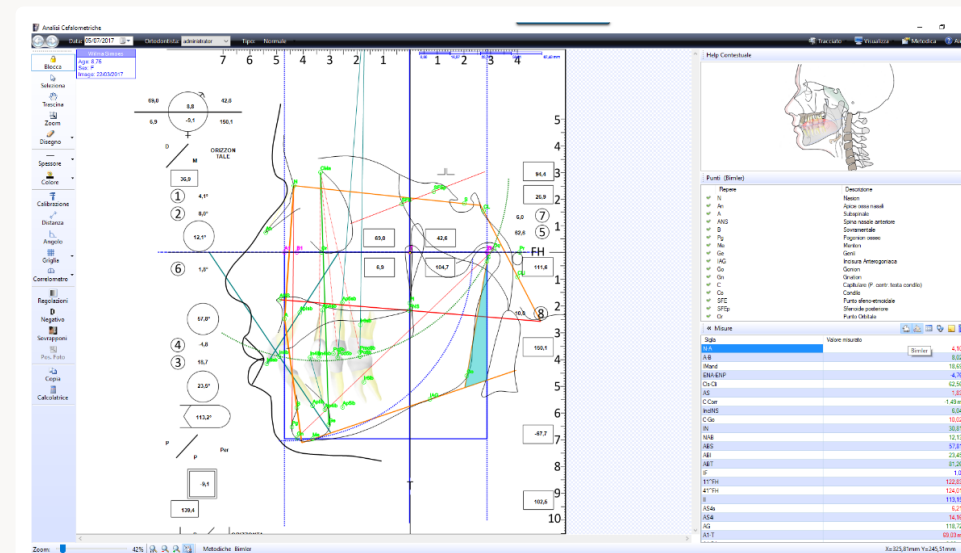
# Functional Orthopedics of the Jaws OFM

OFM-CISOFM pack

OrthoTP® is one of the few programs in the world, able to satisfy every specialist in orthodontics both in the biomechanical and functional fields (functional jaw orthopedics).

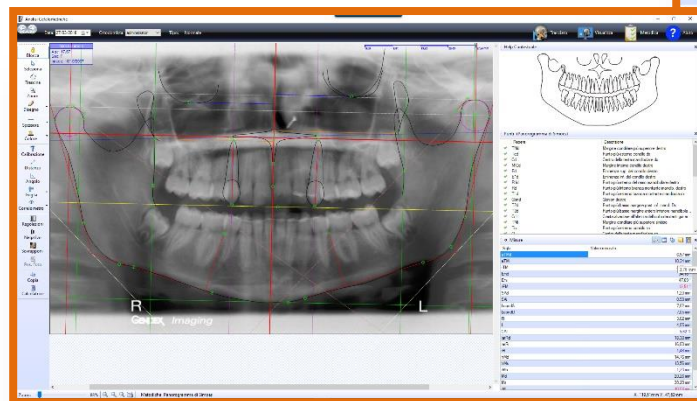Orthotp offers a wide range of orthodontic methods in this area:

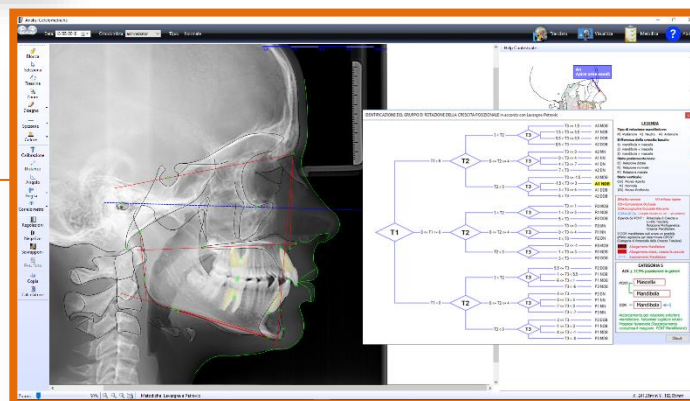Bimler Standard, Simoes Equilibrium Analysis (joint compass), Simoes Panorogram, Lavergne Petrovic.
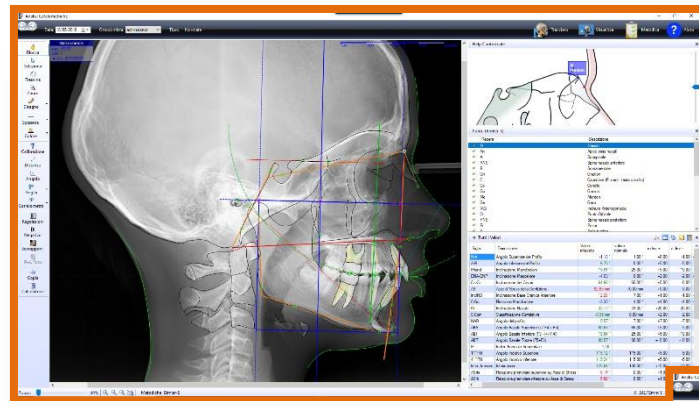
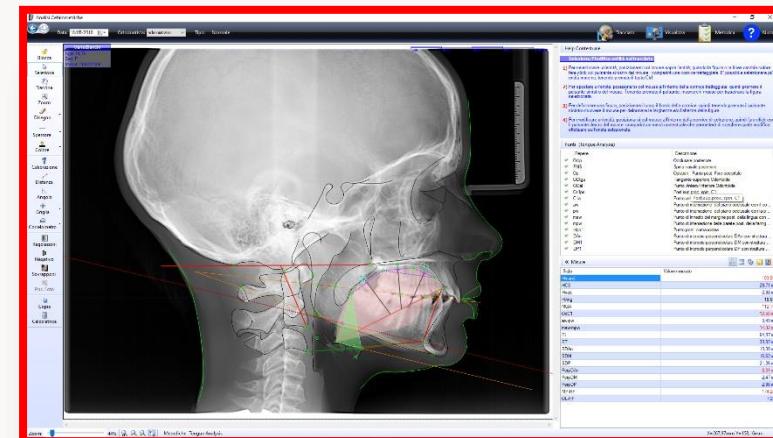**Bimler Standard**
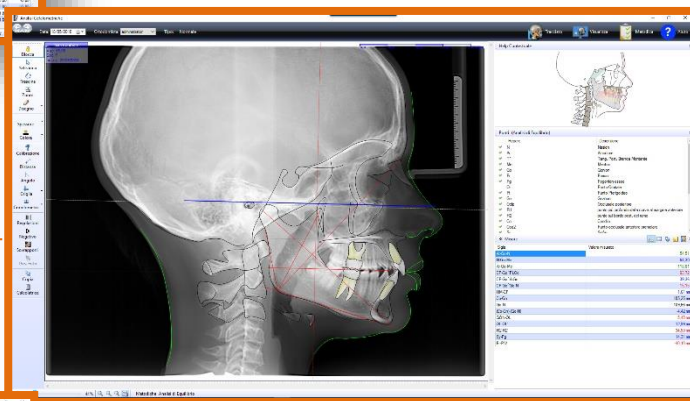
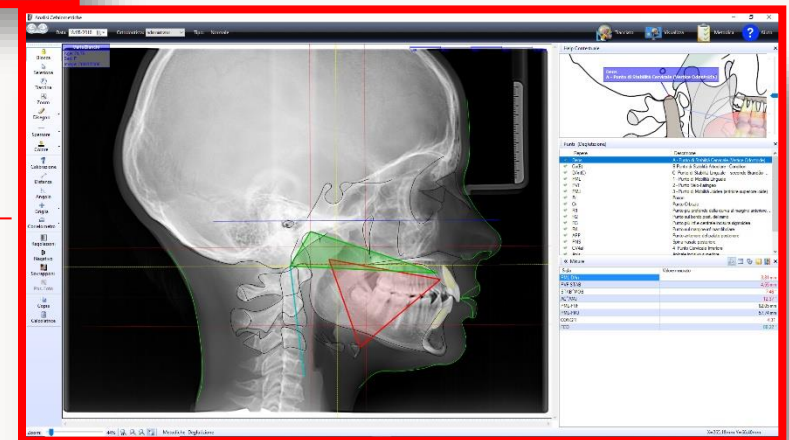**Articular compass by W. Simoes**

Panorogram by Simoes

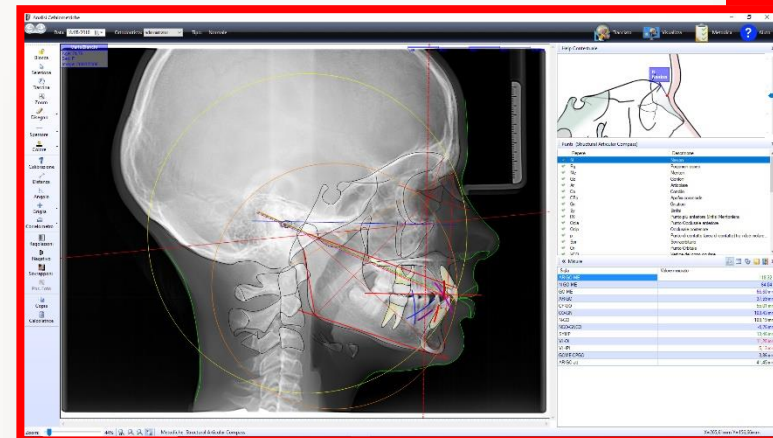**Lavergne Petrovic**

Tongue by R. Brandao

Swallowing according to Norm Chiavaro e CISOFM

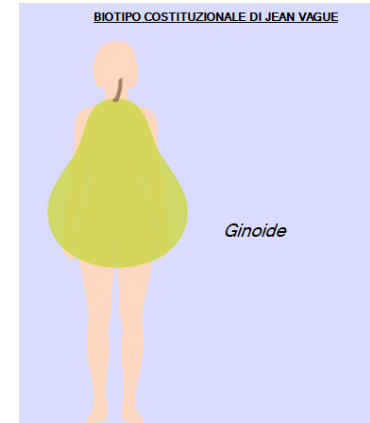**Structural Articular Compass by W. Simoes**

Body Indices (optional)

To always have under control the general state of health of patients, the module for the evaluation of the Body Indices (optional) has been added in the Anamnesis section.

In this last module of OrthoTP you can find:

- graphic highlighting of the main indicators (BMI, CONSTITUTIONAL BIOTYPE, SOMATOTYPE AND CALCULATION OF FAT MASS)

Body parameters

The first step to reach an optimal degree of assessment is to take the patient's body measurements.
In OrthoTP the fundamental ones to achieve this aim have been summarized.

Constitutional biotype of Jean Vague

It is a classification system defined by the French scientist Jean Vague, in order to identify the areas of distribution and accumulation of body fat in order to relate them to particular morphologies and pathological predispositions.

The constitutional biotypes of Jean Vague are divided into the two categories Android (typical male) and Ginoid (typical female)

Somatotype

The somatotype is defined on the basis of the anthropometric characteristics of the subject. Sheldon (1940) was the first to introduce the concept of somatotype, identifying the presence in each individual of three distinct components:
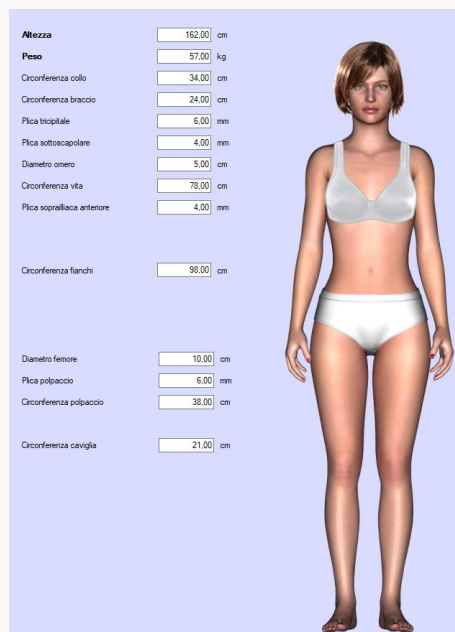
ENDOMORPHIC
MESOMORPHES
ECTOMORPHES

The morphological aspect can be defined by attributing a variable score from 1 (minimum) to 7 (maximum) to each of these three components.
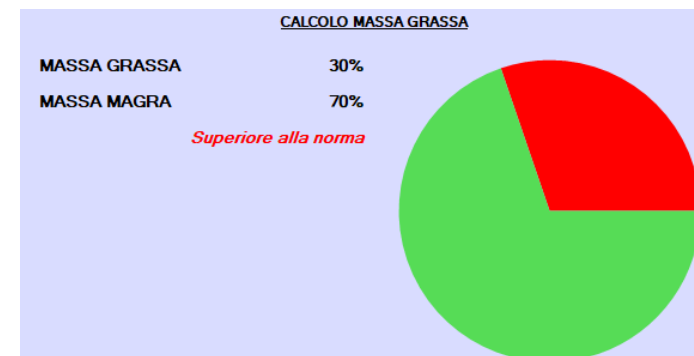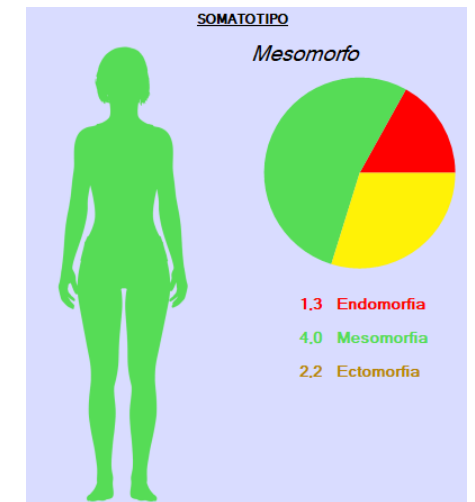
Calculation of fat mass

Fat mass and lean mass are two values that indicate, respectively, the amount of fat, on the one hand, and everything that, on the other hand, is not lipids or fats in our body. Calculating these indicators with respect to your weight and height is important first of all to determine the body mass index, given by their ratio.

BMI

The BMI - Body Mass Index - is an indicative estimate of body fat.

![MICROLAB SOFTWARE]
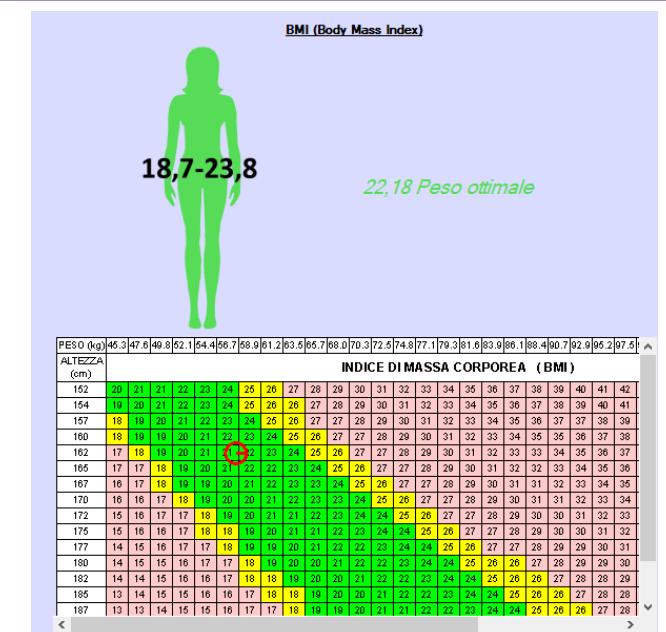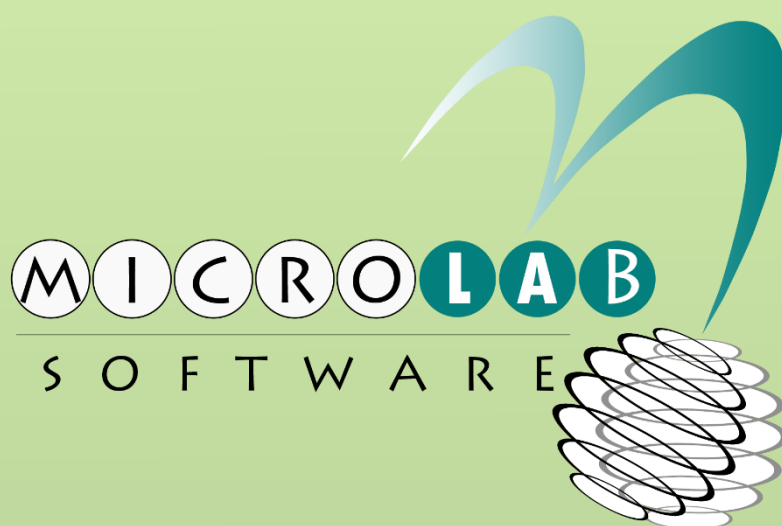
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