Consulting time was shortened drastically after introducing AtoZ. The preparation for academic conference presentation was easy and smooth with the help of AtoZ. Communication between doctor and dental technician also became easy due to image transmission. The number of orthodontic patients has noticeably increased with using AtoZ. The program is highly esteemed not only in Japan but also throughout the world. After I started using "CephaloMetrics AtoZ", my working time was shortened and sleep time increased. Orthodontic analysis, VTO, and any other kind of simulation became easy to perform. I even think that frequency of software usage is the highest in our clinic. It is obvious that after introducing this program, the number of patients has increased. Shifting to digital radiography and data import was smooth as well.

YASUNAGA Computer Systems Co., Inc.
**NEW DIGITIZED SETUP SCREEN**

Taking an X-ray image
1. Taking X-ray directly from the EPSON TWAIN type scanner (EPSON Expression 1680 Pro. with transparency)
2. Taking X-ray image from IP plate scanner
3. Digital X-ray integrations are available. AtoZ can read JPEG files from the CCD X-ray equipment.
4. WACOM tablet can be used too.

**NEW CAPTURE SETUP SCREEN**

Importing a set of color images
High resolution scanning is possible with EPSON transmissive scanner. Pictures taken with digital camera can be easily imported too. Other images with high resolution can be copied from any picture processing program and pasted directly into AtoZ.

An image can be imported with a chosen frame, flipped and rotated.

**Thumbnail input.**
JPEG images imported from digital camera can be dragged and dropped into a Thumbnail list. If X-ray image is saved as a JPEG file, it can be inputted into a thumbnail list in the same way.

**Resolution of X-ray images**
Format which supports:
- JPEG, TIFF, BMP, PICT, DICOM

**Calibration**
Any image can be calibrated by point and distance input.

**EXPLANATION FOR PATIENTS**

First report for patients without X-Ray.
An informed consent document can be prepared for explanation purposes (pictures of mouth taken with digital camera). Inputted images can be printed out for further explanation to a patient as well as used as a part of treatment documentation.

It can use even if the materials for the explanation of treatment for general dentistry are taken.

**COMPUTER DIAGNOSIS**

- Skeletal type (APDI)
  - Class I, II, III, surgery
  - Open bite or Deep bite (ODI)
  - Extraction or non-extraction (EI)

Diagnosis of skeletal type and the tendency of Openbite as well as decision on extraction are done by AtoZ automatically. The calculation is based on more than 4000 real cases.

Facial type by Dr.Rickets is also displayed.

**Model analysis**
The discrepancy is calculated from an actual arch and computed ideal arch. It is convenient for the explanation of the extraction to the patient.

**All AtoZ data can be searched by patient name and number.**

**How to use AtoZ image database**
With an image access function, all AtoZ image files on server can be instantly displayed. Moreover, all data can be searched by patient name and number. You can set up to 3 types of data view format.

**JPEG image database features**
It is now possible to access and view image data in JPEG format. Patient’s folder and image are displayed on the left and right side of the screen respectively. Double-click an image to zoom in.
**Analysis point input**
Points can be inputted directly into the X-ray images using picture processing software with the help of computer voice or guidance window.

**Template point input**
All points can be displayed by inputting Porion, Orbitale and Gnatic points. After point input finished, all points can be connected with lines by mouse dragging.

**Easy indication bisectrix**
When Gnatic and Gonion position is required, vertical bisectrix can be drawn, even if not all points are inputted. It is possible to copy and paste tracing data from AttoZ into other programs.

**VTO BY DR. RICKETTS and M-VTO BY DR. GUGINO**
AttoZ supports Visual Treatment Objective of Dr. Ricketts. VTO is displayed when the number of years of growth and VTO Parameter are given. Superimpose and 5s parameters may be taken for comparison. Growth data are registered in the program according to race. A patient profile image is changed to a treatment image automatically.

**ORTHODONTICS-SURGICAL SIMULATION**
Orthodontics and surgical simulations can be performed both lateral and frontal. In case of lateral, a surgical simulation can be done by cutting mandibular bone in four places and maxillary bone in one place. Numerical values can be inputted into a dialog window. User can define the movement of soft tissue in the Orthodontic treatment simulation.

**Morphing movie**
We achieved to display not only the images after a simulation, but also perioperative changes of patients as movie. You can see both frontal and lateral on either Windows or Macintosh software.
PLENTY OF VIEW FORMATS

With the help of plentiful view formats it is possible to provide a patient during his or her first examination with a case sample presentation, treatment process and images of treatment results. A view format can be changed at any time and all information can be printed out to patient attention.

CUSTOMIZABLE ANALYSIS

14 different kinds of lateral analysis (Ricketts, Steiner, McNamara, Down&Kim, Jarabak, angle analysis, Liner analysis, soft tissue analysis, Bimler analysis, Tweed, Roth, Arnet) as well as 6 kinds of frontal analysis (Ricketts, Symmetry etc) are available. In addition, program supports submentovertex analysis.

User can do the addition of the point and the definition of original analysis.
User can add the points and set analysis parameters (up to 60 points: norm, standard deviation and indication line).

Norm
Norm is defined in each analysis as Asian, Caucasian, Black and Latin. Norm and standard deviation can be customized by user.

Setting image compression
Image data saved into AtoZ can be compressed (around 1/12). Recent hard discs have a large capacity, so the data can be saved without or with a minimum compression to avoid data loss.

Superimpose
X-ray image can be easily imposed on a facial photograph.

X-ray Superimpose
Easy-to-use method for imposing X-ray images.

STATISTICAL WORK & FILE OUTPUT

Statistical work and coordinate value
Norm, standard deviation and coordinate value of patient data in original analysis can be calculated for further statistical work with posttreatment data.

Excel output
The results of analysis can be exported to external file and the data can be used for further statistical work such as SPSS. It can be used in Excel spreadsheet environment.

Calculation
A segment length and area value can be exported to a file as miscellaneous function of measurement. X-Ray measurement and area calculation can be easily performed without Cephalo analysis.

Image copy/paste and trace
An image can be copied and pasted to other applications. A letter to a treating doctor showing trace lines and images with calculated values can be easily created using Word-type software. An image analysis, trace and calculated values can be pasted to PowerPoint for demonstration purposes.

Transfer of patient data
Our software allows you to transfer data by e-mail, CD, etc. Transferred data can be used on both Macintosh and Windows machines.

WINDOWS AND MACINTOSH VERSIONS

CephaloMetrics AtoZ can be used on both Macintosh (OS X10.4~10.6 Snow Leopard) and Windows (Windows XP, Vista, 7) OS. We provide you with software for converting data between Macintosh and Windows. There is also a network version of the program allowing simultaneous use of up to 5 machines with one protection key as well as version allowing mixed using of Macintosh and Windows OS.

CephaloMetrics is widely used in Dentistry, Orthodontics department of dental colleges, Oral surgery, Pedodontics, Department of radiology, Department of prosthetics, Plastic surgery, Respiratory equipment, SAS (Sleep Apnea Syndrome) treatment, etc.

Used by many doctors, with great know-how feedback.

A certain analysis and the diagnosis of AtoZ are effective to avoid a trifling trouble with the patient.

Medics who saw the program demo are usually satisfied with the capabilities of AtoZ and patients show even more satisfaction.

AtoZ can be used on Macintosh and Windows.

With network version of the program, the same server can be accessed from any chair side.

Medics from all around the world use AtoZ as manual and for providing e-mail and fax support. The number of users from abroad continues to grow.

Windows

- Intel Core 2 Duo
- RAM 2GB+ (4GB recommended)
- Windows XP, Vista, 7
- Display resolution, 1,920x1,080+ recommended

Macintosh

- Intel Core 2 Duo
- RAM 2GB+ (4GB recommended)
- Mac OS X10.4~10.6 Snow Leopard
- Display resolution, 1,920x1,080+ recommended

Please ask hardware and peripheral devices to use CephaloMetrics AtoZ to our company.