



# PaX-i3D<sup>Smart</sup>

*Green for all, Smart for you*

# “Green for all, Smart for you”



## **Green Innovation**

- *Low Dose CT*
- *One Scan, Two Images*

## **Image Quality Innovation**

- *Reconstruction Technology*
- *Auto MAR Technology*
- *Magic PAN Technology*

## **FOV Innovation**

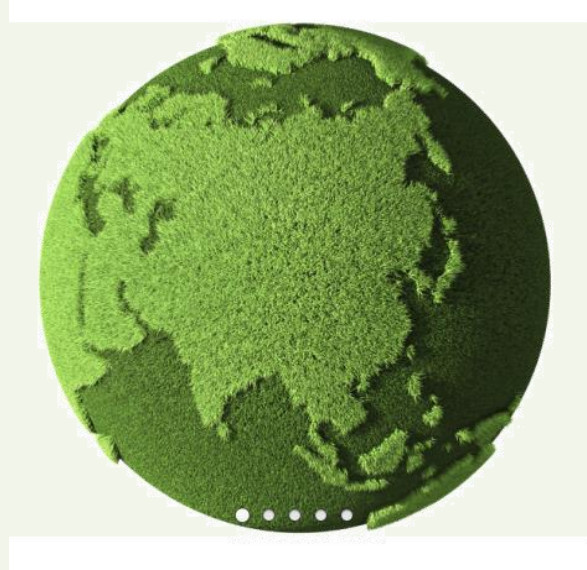
- *Arch-shaped FOV*
- *Extended 10x8.5 FOV*

## **Software Innovation**

- *Ez3D-i*

Low dose technology  
takes care of  
patients' health





## **World's 1<sup>st</sup> Low Dose Green Sensor Manufacturer**

*You don't need to imagine anymore. Low dose radiation scans are a reality.  
Imagine a device that can provide superior diagnostic quality radiograph and significantly lower dose at the same time.  
Imagine what it all can do for a dental practice and patient safety.*

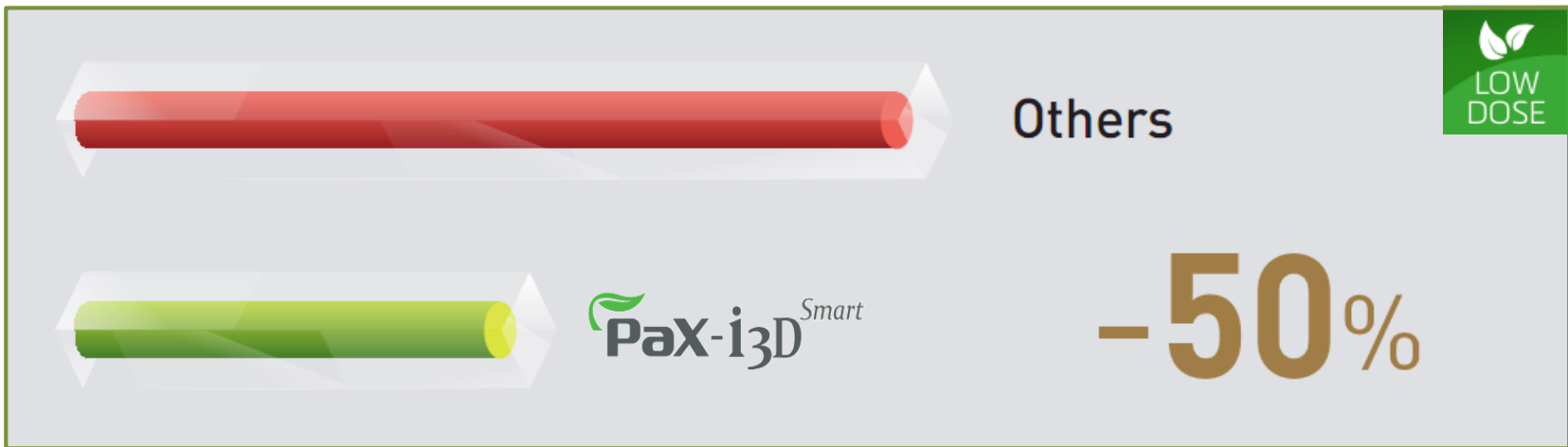


VATECH's low dose X-ray technology reduces radiation level of PaX-i3D Smart; **50% lower** than other imaging machines.



PaX-i3D Smart provides specific imaging mode for children and it is resulted from our efforts to **protect children** more from radiation.

[DAP : Dose Area Product]



Normally, FOV 8x8 imaging machine has about DAP 800~1,000.

If you convert radiation level of PaX-i3D Smart(10x8.5) to FOV 8x8, the level is **under DAP 300**.



PaX-i3D Smart gives you more!

With just one scan, you can have **both 3D** and **advanced 2D images**.



CT scanning provides not just CT image but panoramic image which you are accustomed to.

For this, patients who require both images, no need to be under X-ray two times.

Plus, what's better thing is both images are displayed within one viewer.

(Available on Ez3D-i V4.0 in 2015)

One Scan,  
Two Images



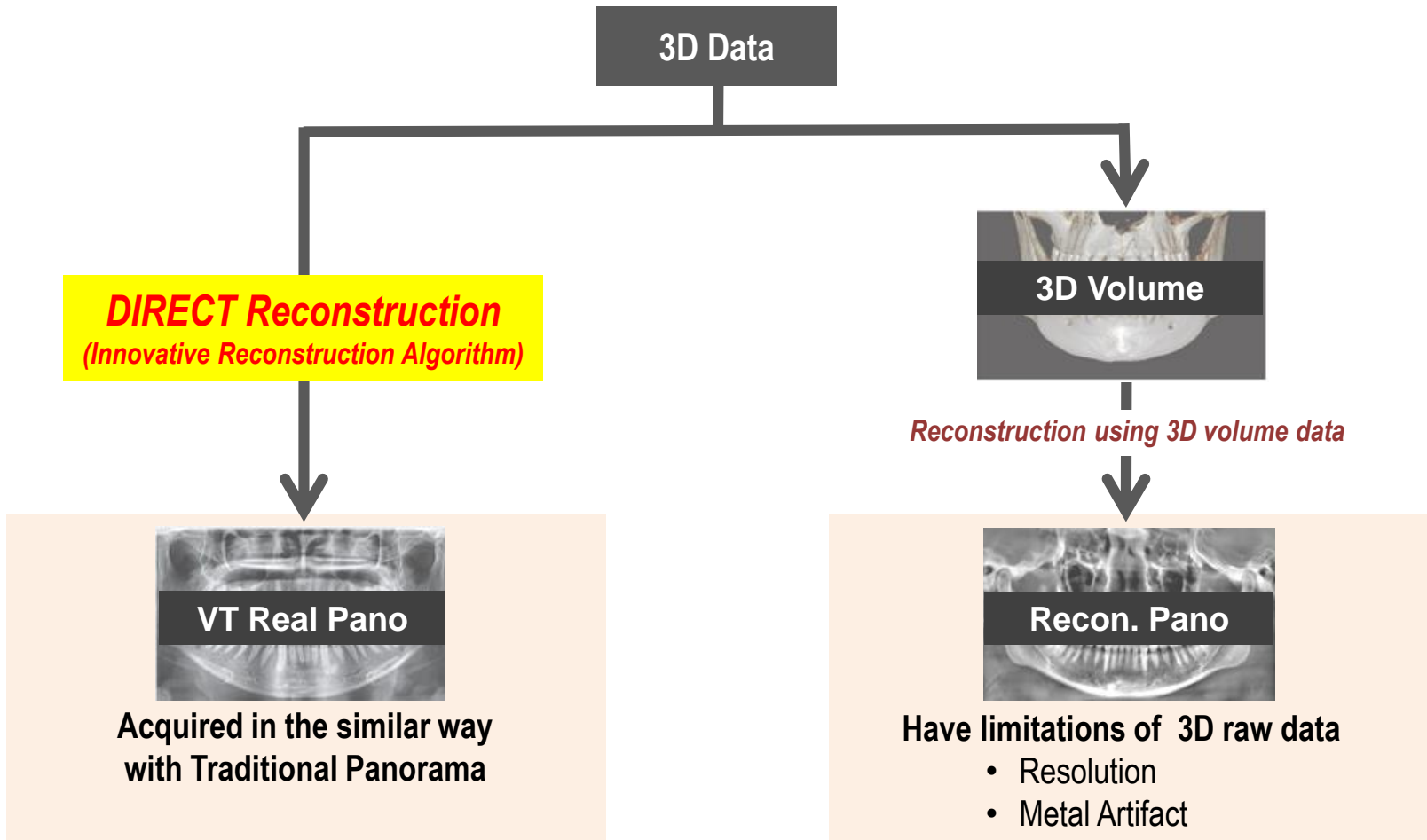
\* Only panoramic image can be acquired.



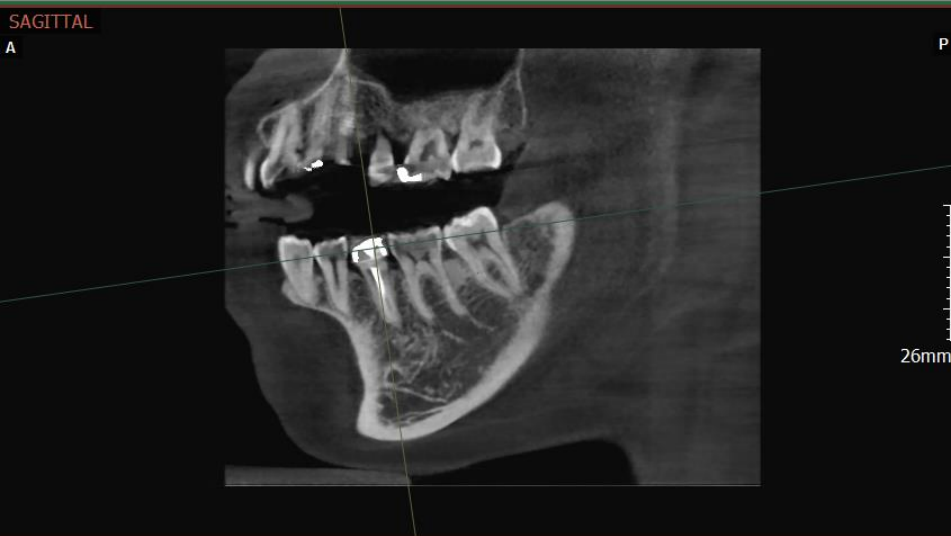
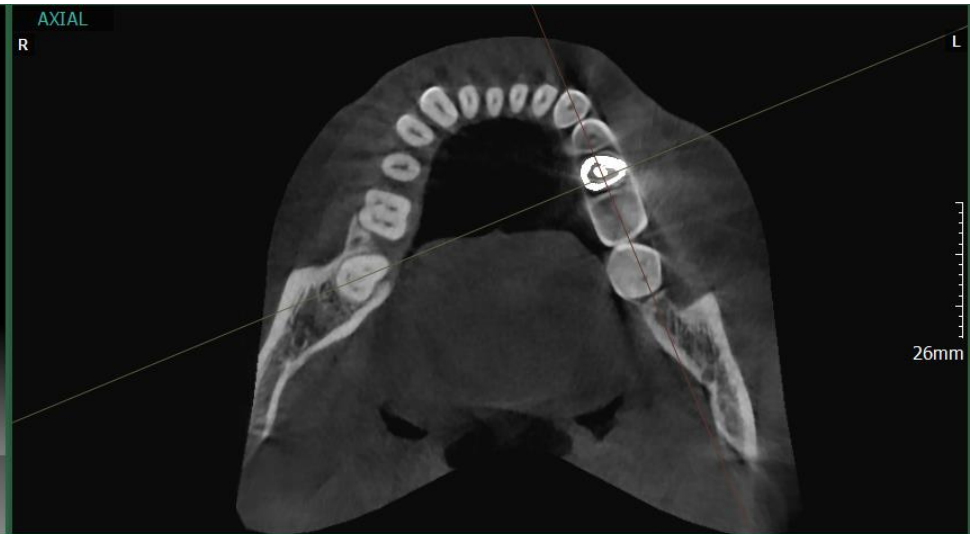


PaX-i3D Smart gives you more!

With just one scan, you can have **both 3D** and **advanced 2D images**.

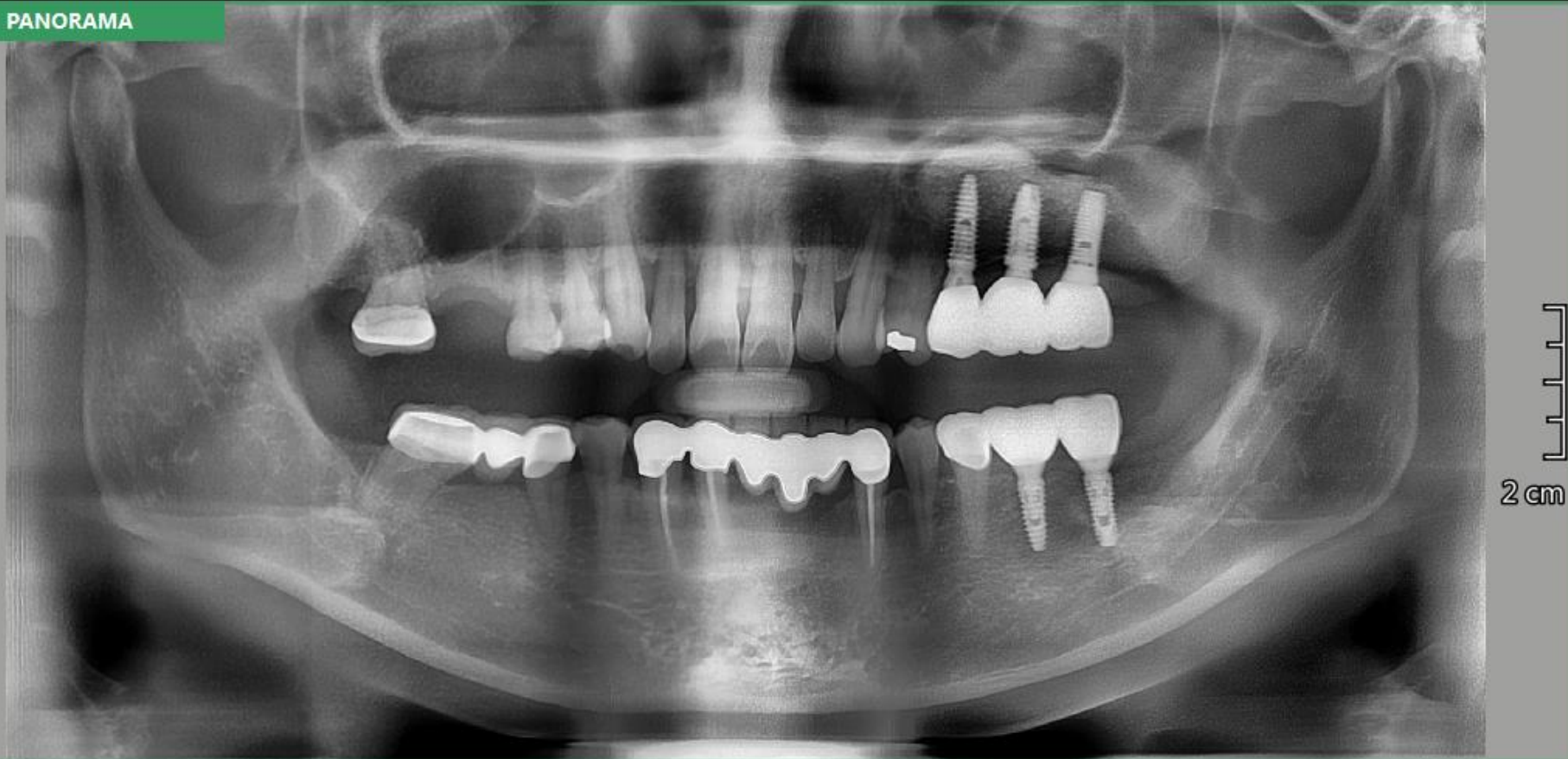


[Sample Image : CT]



[Sample Image : Real Pano]

PANORAMA





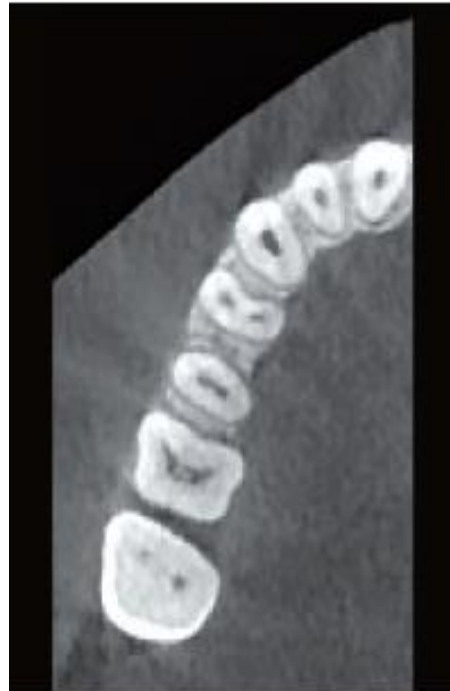


3D image quality is dramatically improved based on **the innovative image reconstruction technology.**

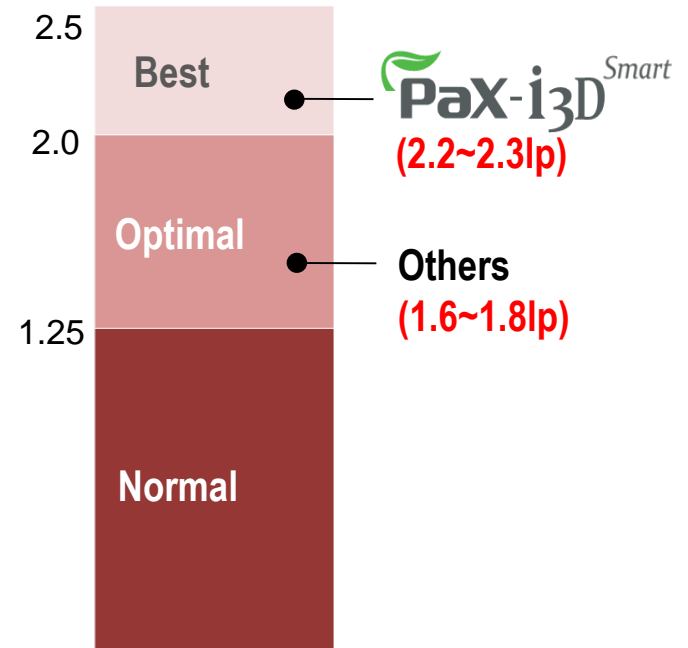
Current CBCT



**PaX-i3D** Smart

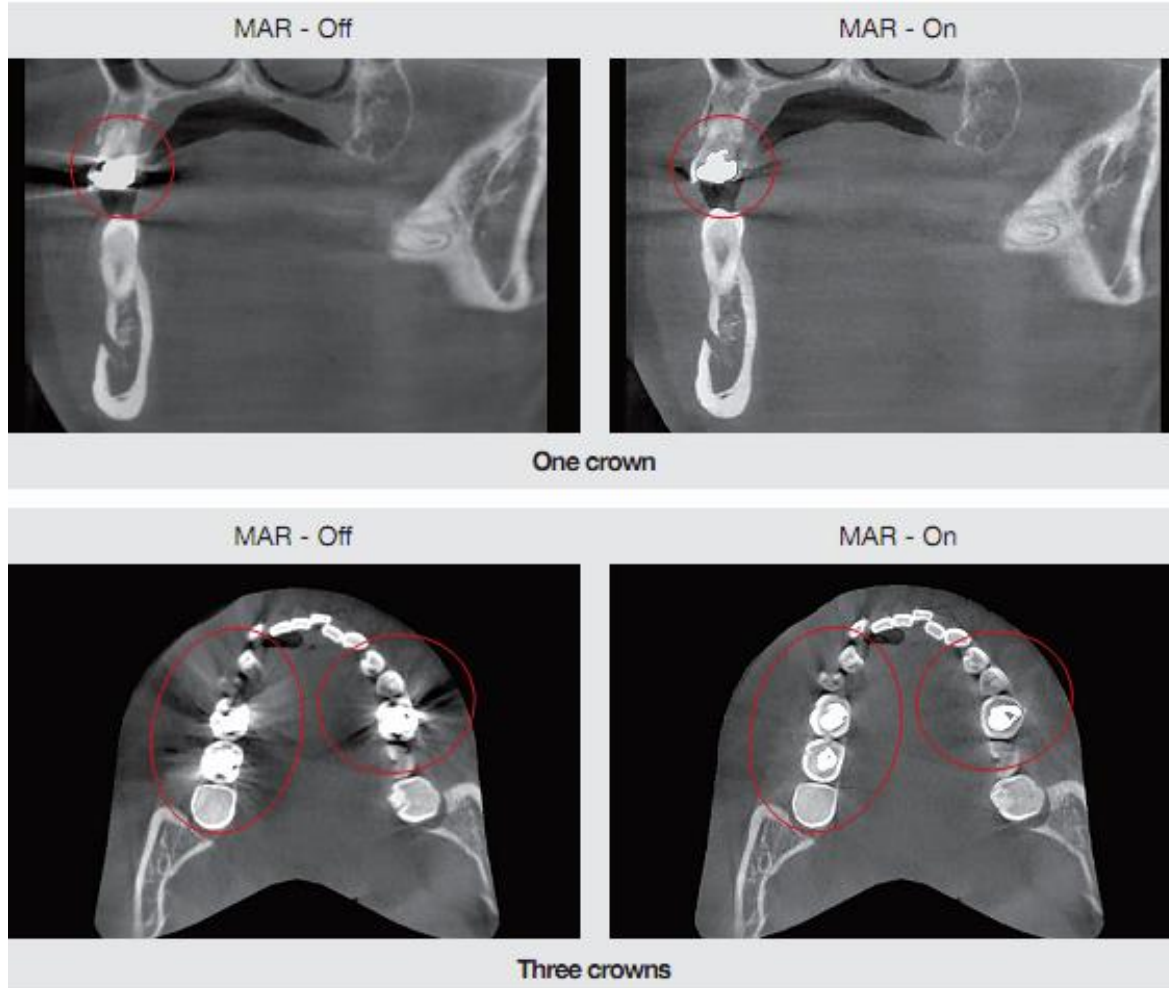


In case of voxel size 0.2mm, limitation resolution is 2.5lp.

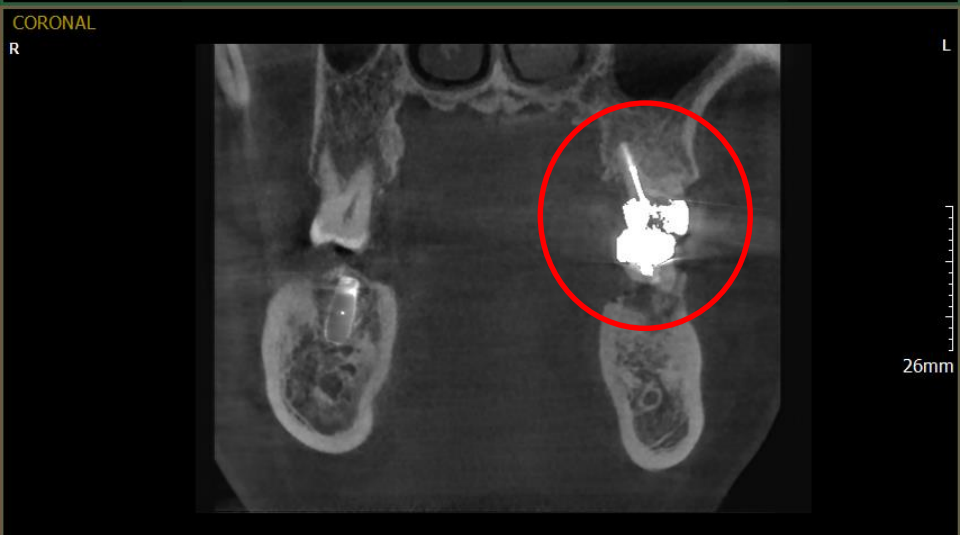
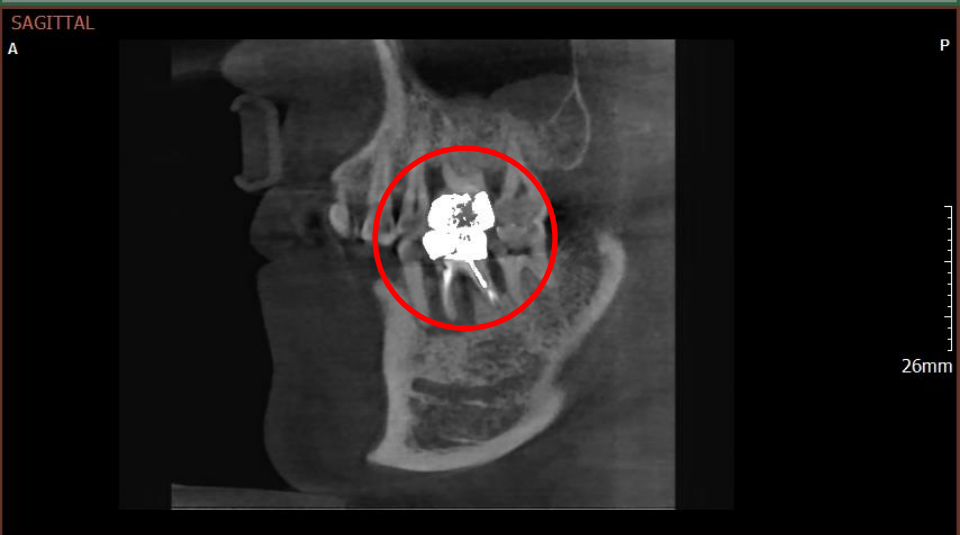
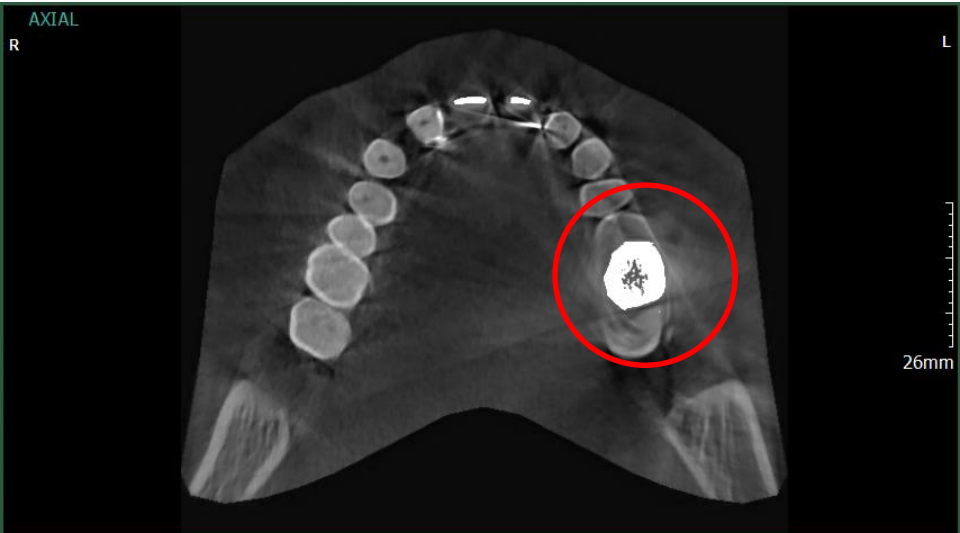




PaX-i3D Smart is equipped with **AI Auto MAR**; it reduces metal artifacts based on characteristics of each different metal. When there are more than three crowns, **MAR technology on each point is automatically adjusted**.

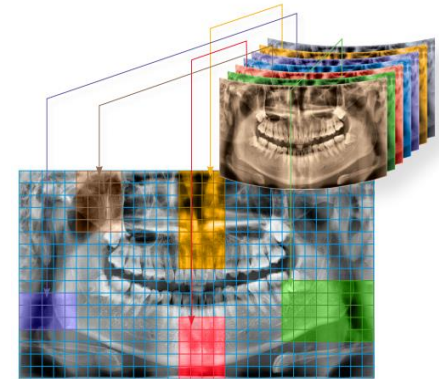


[Sample Image : 2 Crowns ]

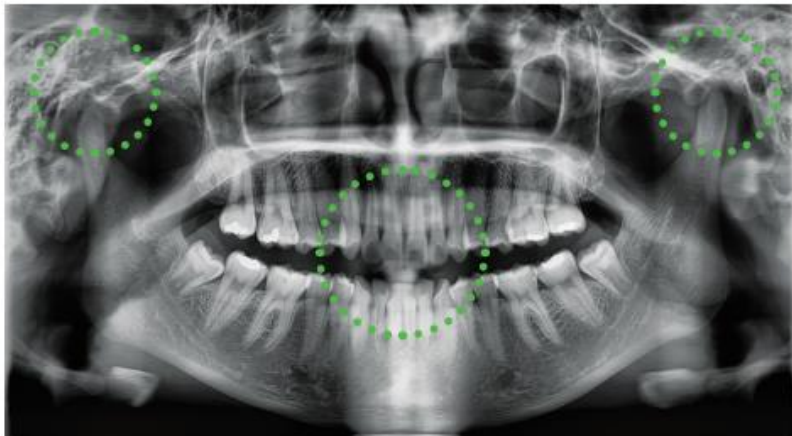




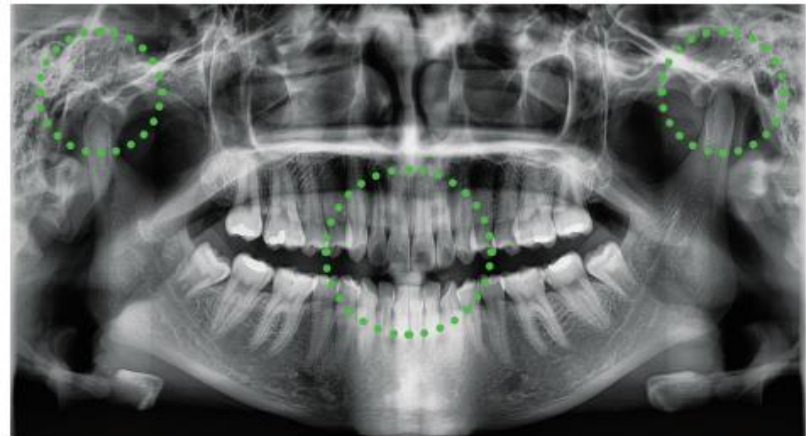
Magic PAN creates a more superb panoramic image. It is acquired through the **elimination of distorted and blurred images** caused by improper patient positioning.



NORMAL



MAGIC PAN

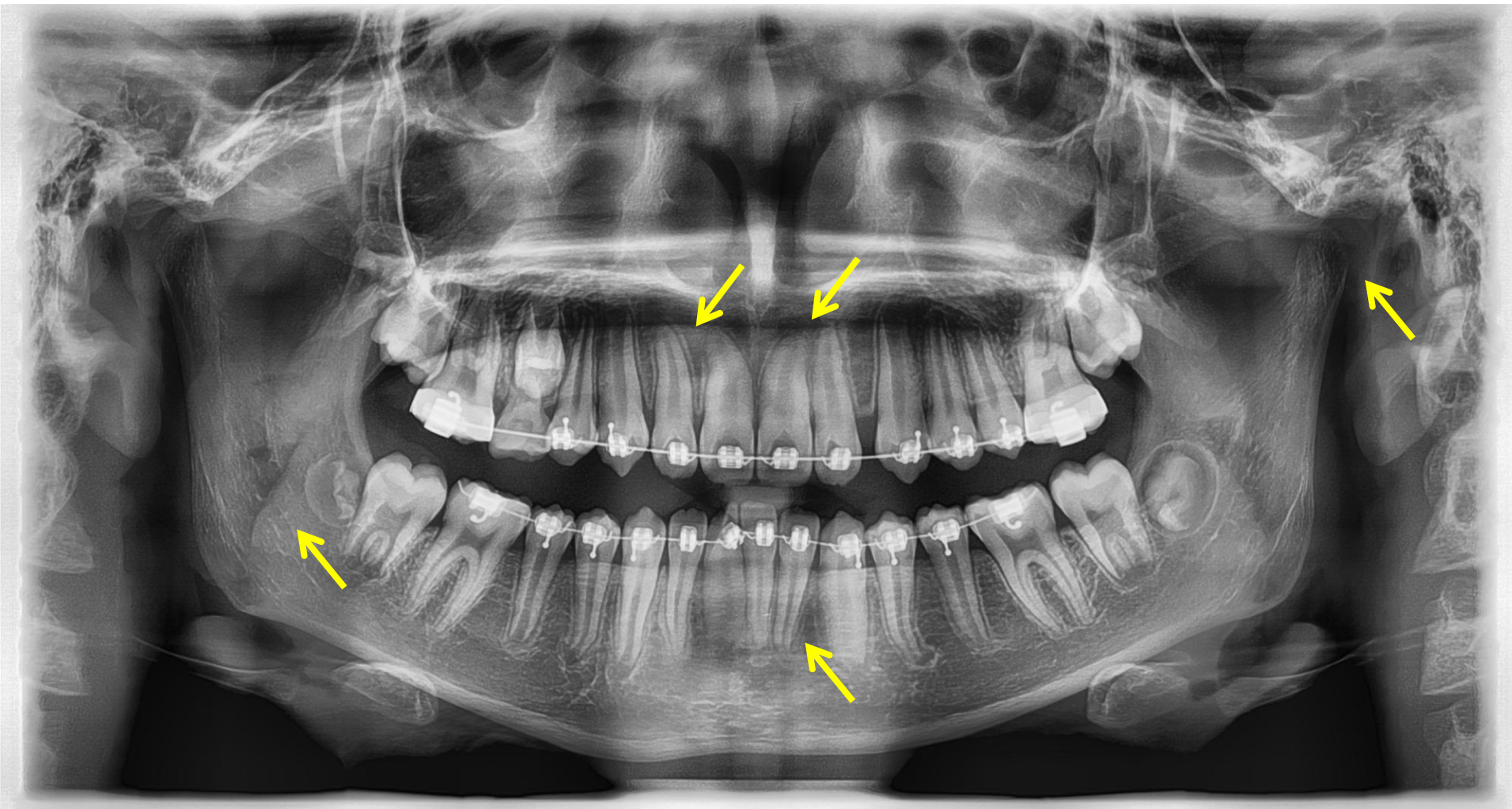


Focused image is reorganized throughout the whole dental arch and the image quality can be increased. The image becomes clearer especially in the incisor and canine region, TMJ areas and root canal.

[Sample Image : Normal]

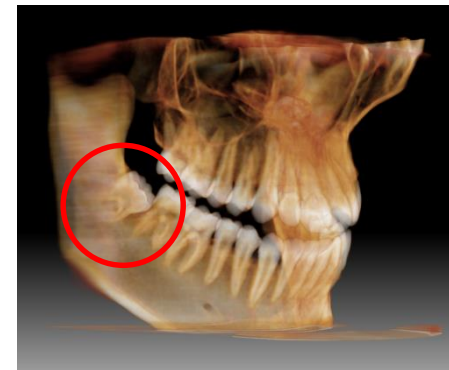
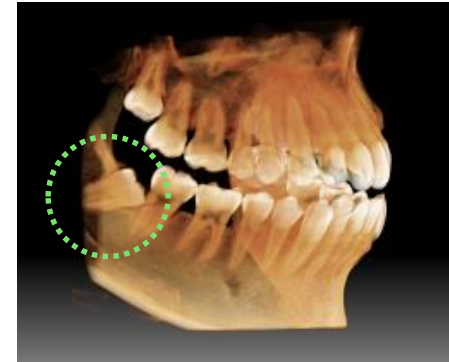
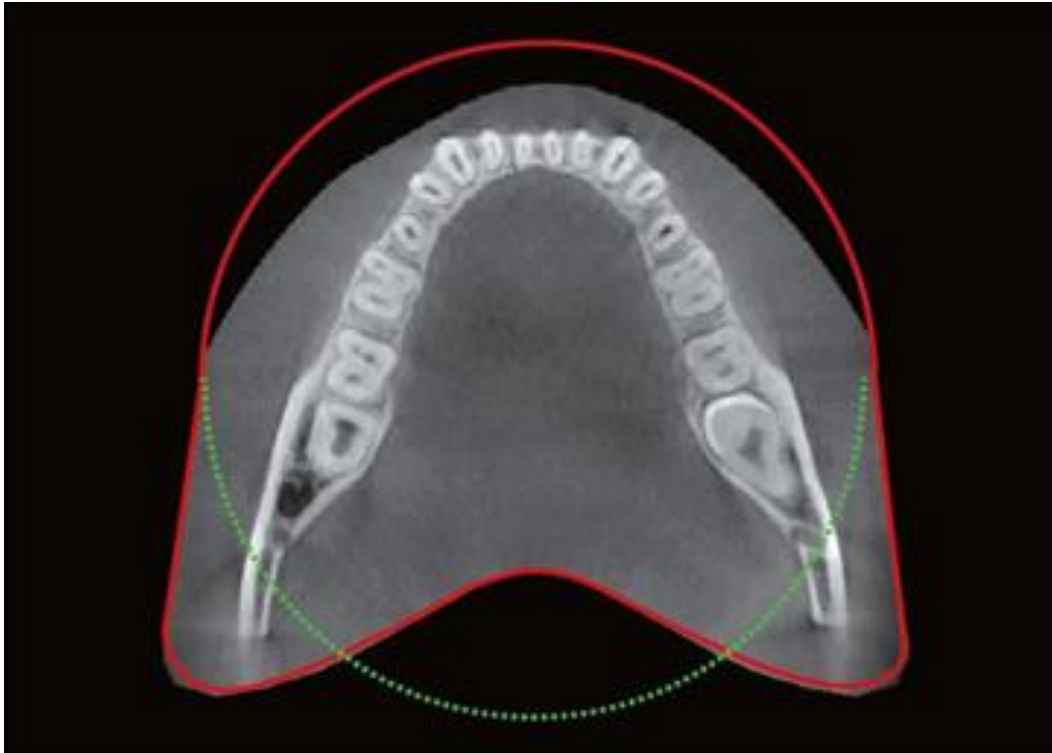


[Sample Image : Magic PAN]





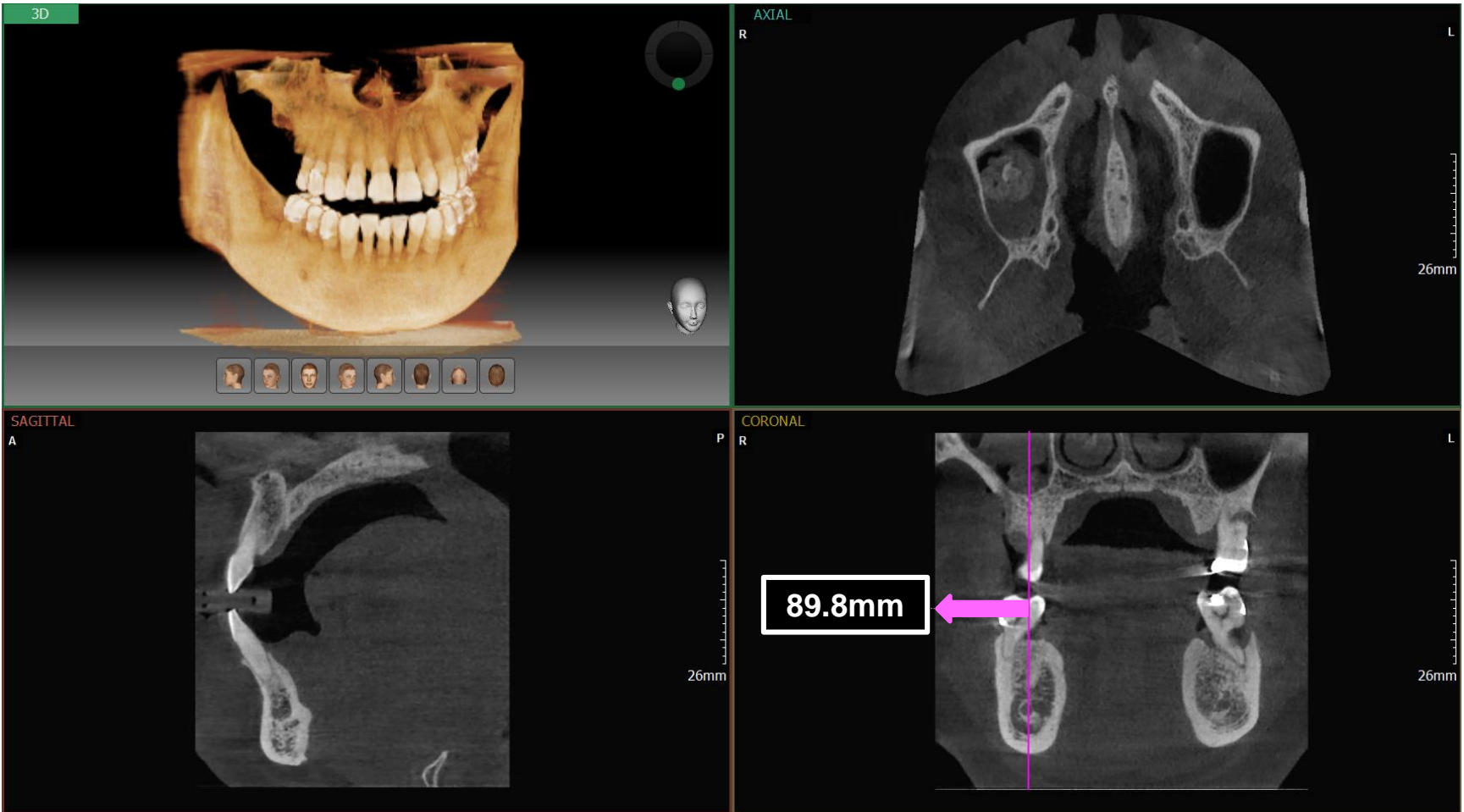
Innovative FOV of PaX-i3D Smart provides arch-shaped volume and it shows wider view of dentition than the same FOV of others.



Normally, FOV10x8.5 image shows tooth #8. However, when the tooth is lying on its side, there is high probability of having the tooth cut. “Arch-shaped Volume” eliminates this probability showing hidden area of dentition.



Innovative FOV of PaX-i3D Smart shows you **more than 10x8.5**.  
It's enough for sinus diagnosis.

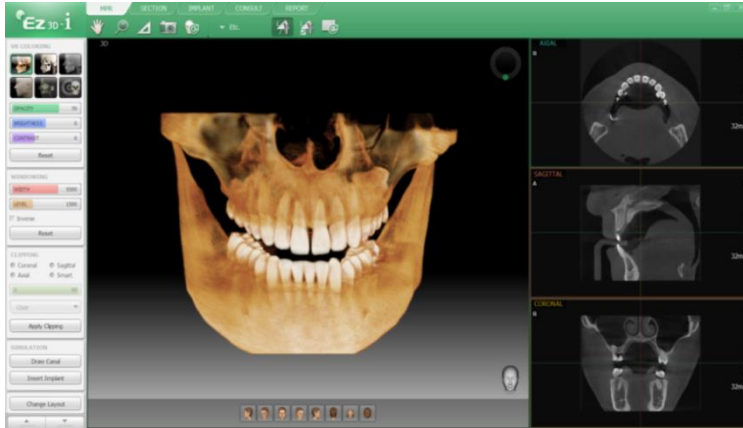




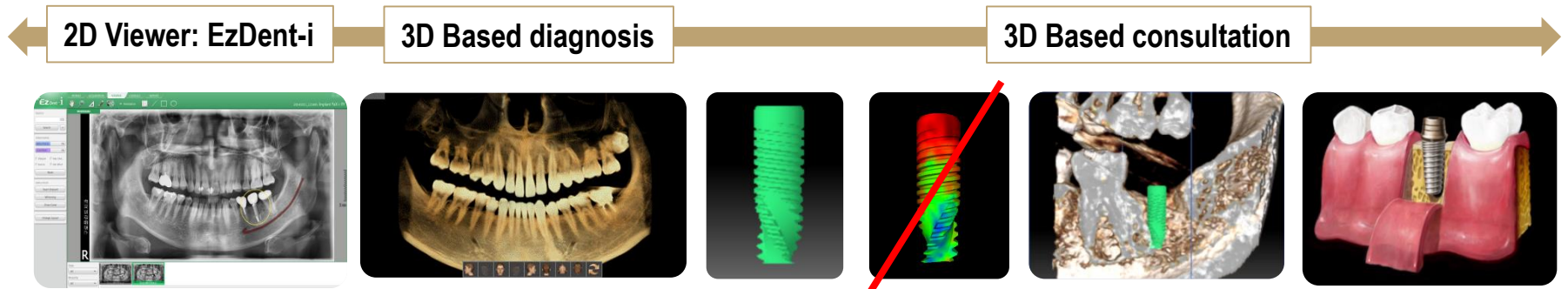


Ez3D-i supports whole process of surgery.

Specialized functions for diagnosis and consultation make everything so convenient.

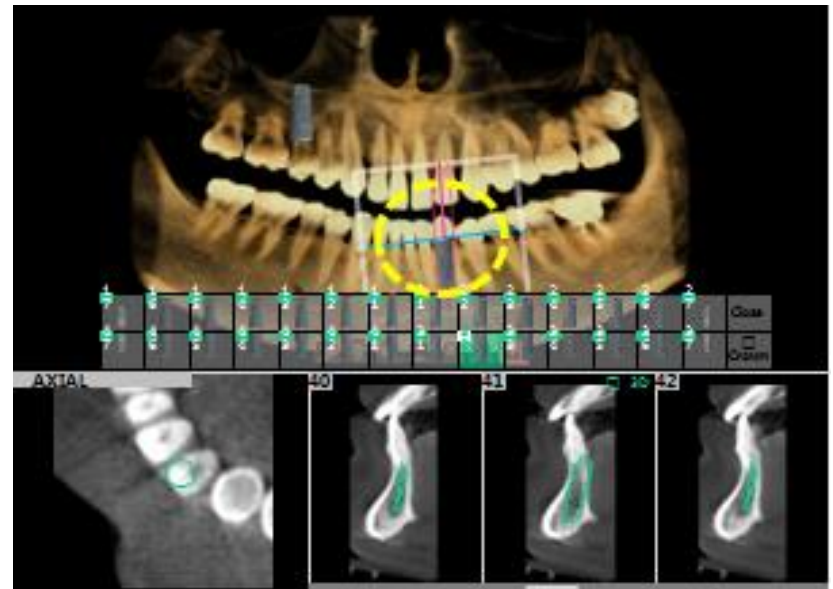


	Diagnosis	<ul style="list-style-type: none"> <li>• High quality of VR</li> <li>• Smart Clipping</li> <li>• One Click Section</li> </ul>
	Simulation	<ul style="list-style-type: none"> <li>• 3-Step Implant Simulation</li> <li>• Real Implant Fixture</li> </ul>
	Consultation	<ul style="list-style-type: none"> <li>• Implant Clipping</li> <li>• 3D Bone Density</li> <li>• EzCodi</li> </ul>



## 3D PAN

[3D PAN] Tab of Ez3D-i makes everything “QUICK” and “SMART”. With “volume panorama”, lingual-side diagnosis is possible. Also, it supports effective and exact check of lesion’s location during endodontic treatment whether it’s near the apical or not.



### One-Click for ROI diagnosis

- 1 sec. for cross-sectional images
- No need complicated training course

### Implant Simulation with 3D PAN

- Easy multi-implant simulation (Top-down available)
- Various modes for exact bone density

<b>Function</b>	CT(with Real Pano) + Pano + Ceph	
<b>Focal Spot</b>	0.5 mm	
<b>CT FOV Size</b>	<b>Adult</b>	10x8.5 cm
	<b>Child</b>	10x7 cm
<b>Voxel Size</b>	0.2 mm / 0.3 mm	
<b>Scan Time (sec.)</b>	<b>CT</b>	18 sec
	<b>Pano</b>	13.5 sec
	<b>Ceph</b>	Scan : 12.9 sec / One-Shot : 0.9 sec
<b>Recon. Time</b>	<b>CT</b>	Max. 90 sec (10x8.5 cm / 0.2 mm Voxel Basis)
<b>Gray Scale</b>	14 bit	
<b>Tube Voltage / Current</b>	50~99 kVp / 4~16 mA	

**Thank you.**