

Comparison pictures before and after correction

March 26, 2020



2021-06-21 Follow-up Wearing for 1 year and 3 months 【Program duration: 1 year and 6 months】



Comparison pictures before and after correction

March 26, 2020



2021-06-21 Follow-up Wearing for 1
year and 3 months 【Program duration:
1 year and 6 months】



Frontal measurement



【Face check】

- 1.No obvious facial asymmetry ;
- 2.Both upper and lower lips are on the Ricketts beauty line ;
- 3.The nasolabial angle is too large (normal is $90^{\circ}\sim 100^{\circ}$)。



项目	测量值
NLA	-104.32°

Smiling face photo



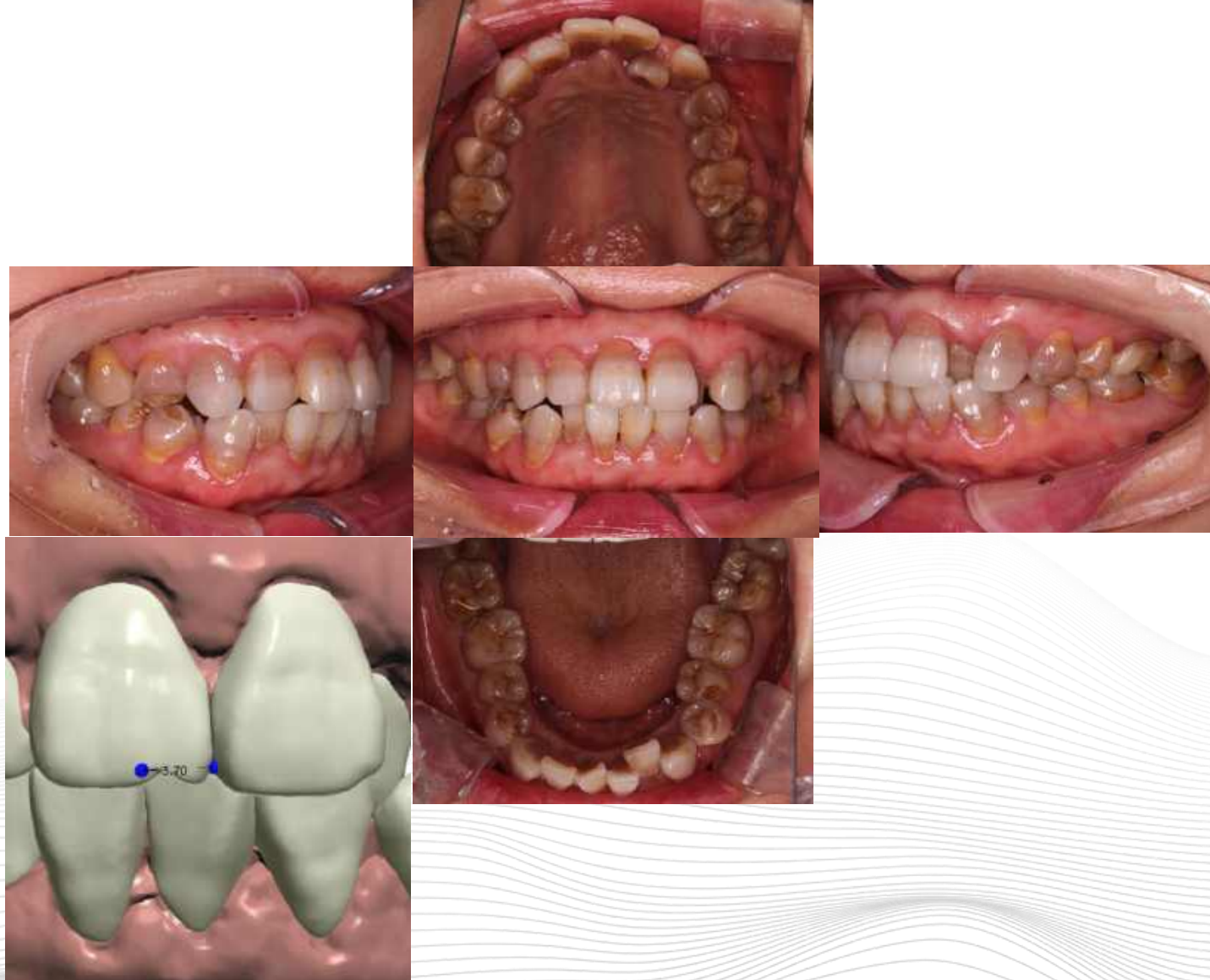
【Face check】

- 1.No obvious facial asymmetry ;
- 2.When smiling, the maxillary front teeth are exposed too little, while the mandibular front teeth are exposed more ;
- 3.22 and the opposing jaw crossbite, 43 and the tough ;
- 4.The midline of the maxillary anterior teeth is coordinated with the midline of the face。

Intraoral photos

【Intraoral examination】

1. Anterior teeth I degree deep overbite ;
2. Class I relationship between canines and molars ;
3. The periodontal tissues of the upper and lower jaws are good. There is a little soft plaque and black staining on the neck of the crown. Pay attention to daily cleaning and teeth cleaning. ;
4. 22, 43 and the opposite teeth crossbite, the upper and lower posterior teeth have defects, the tooth shape is abnormal, because the teeth are tetracycline teeth, no attachments are attached during the correction process;
5. The midline of the mandibular anterior teeth is 3.7 mm to the right of the midline of the maxillary anterior teeth.



Panoramic film

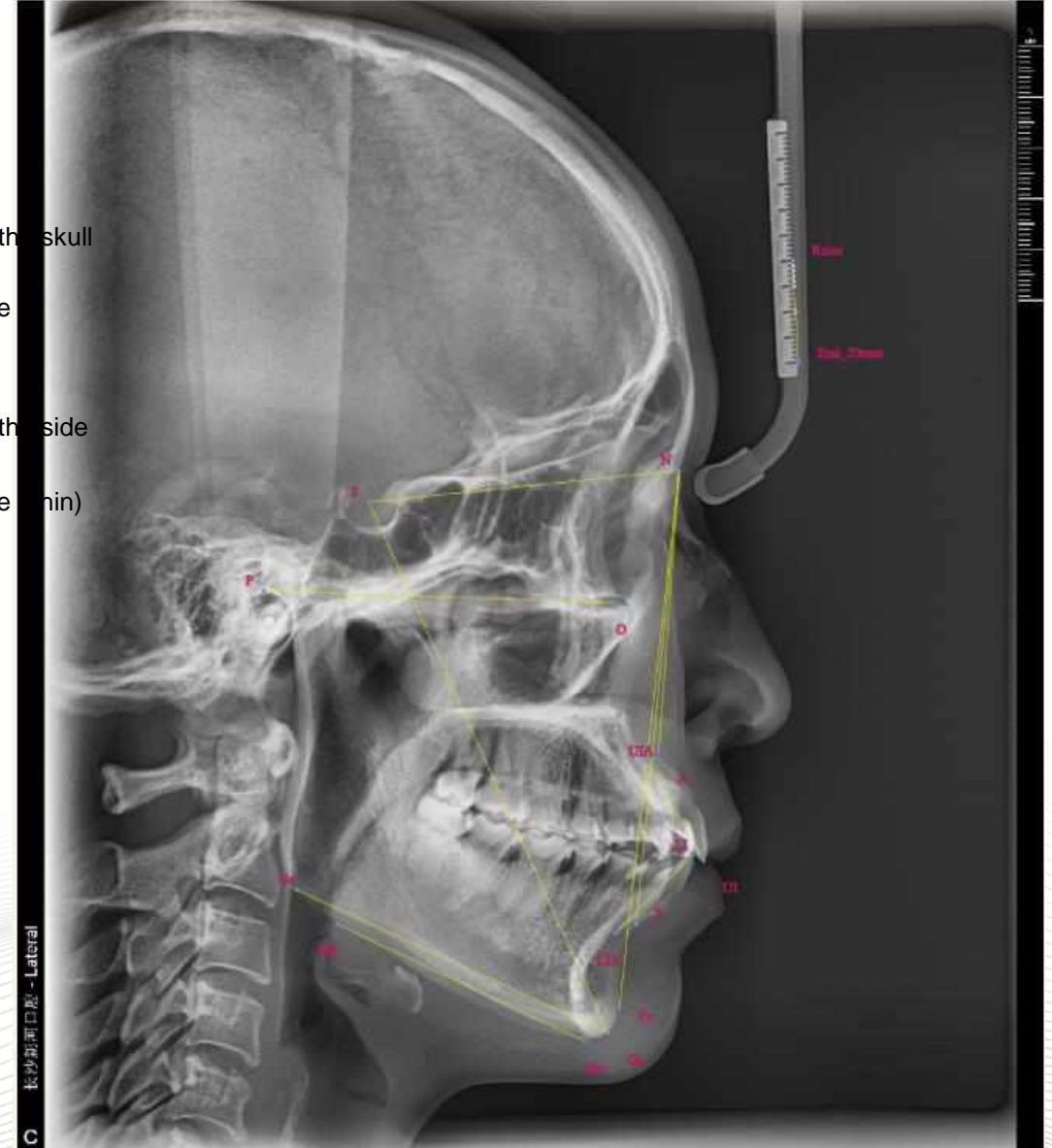
【Curved slice examination】

1. There is overlapping of multiple teeth ;
2. There is no obvious shadow on the root tips of the teeth ;
3. Wisdom teeth in all four zones are present。



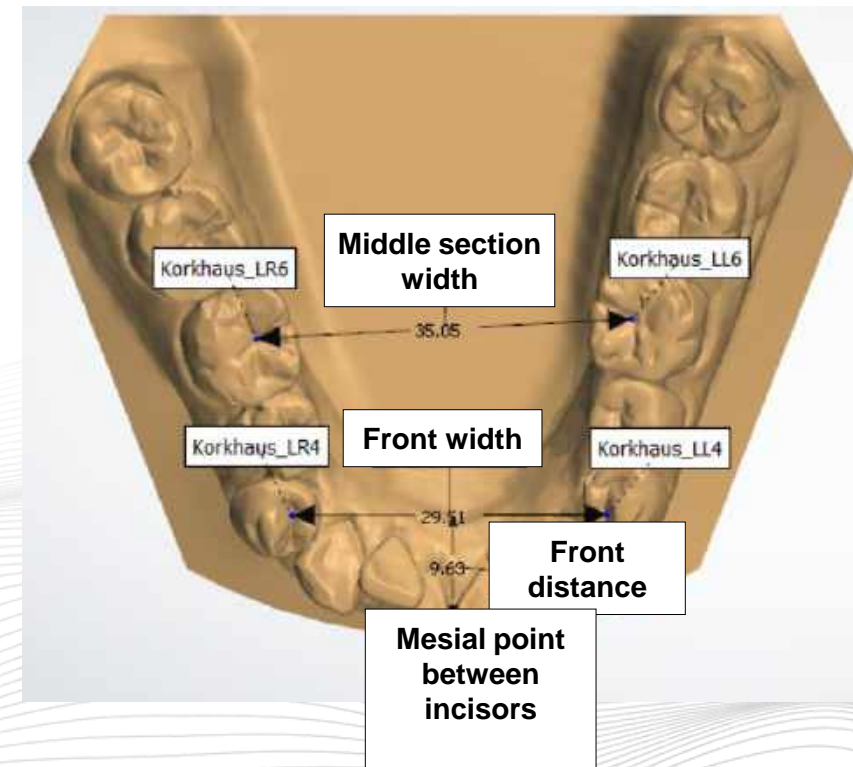
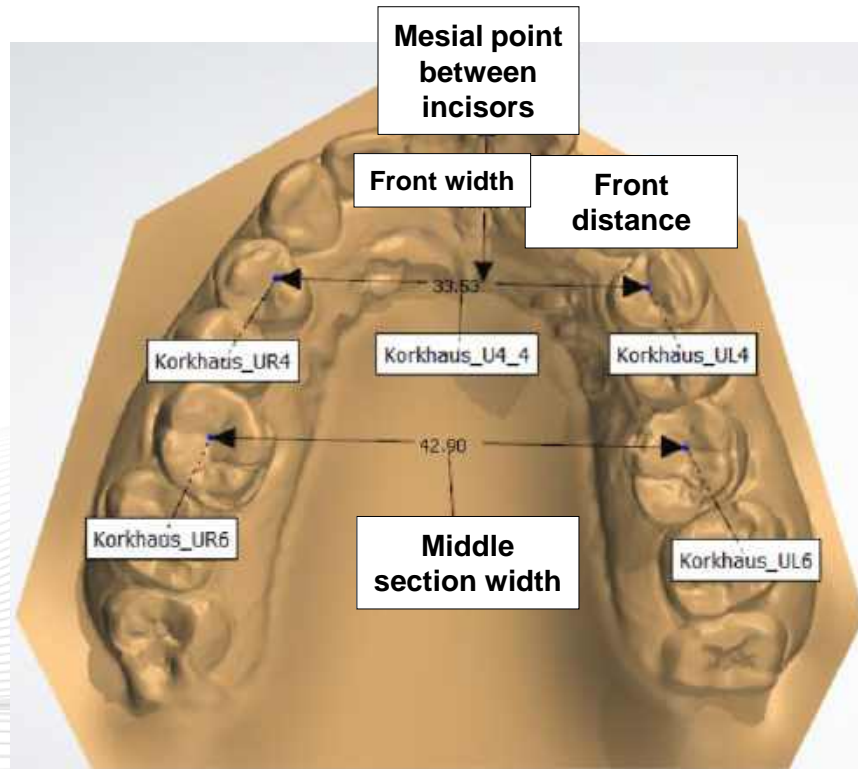
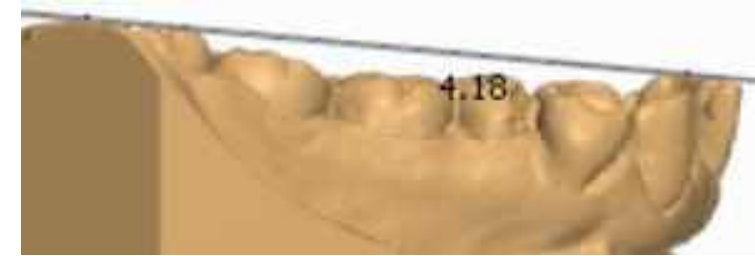
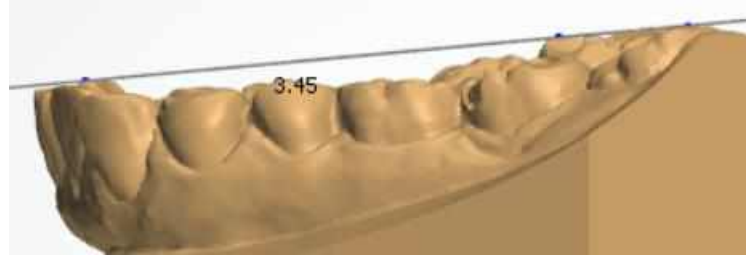
Cephalometric measurement

Measurement items	Standard values	Measurement values	Clinical significance
SNA	82.8±4.0	80.01	Normal anterior-posterior relationship of maxilla relative to the skull
SNB	80.1±3.9	78.8	Relatively normal anterior-posterior relationship of mandible
ANB	2.7±2.0	1.21	Tends to skeletal Class I
Mandibular angle	6.0±4.4	4.54	Normal anterior-posterior relationship of maxilla relative to the side
Face Angle	85.4±3.7	85.55	Relatively normal anterior-posterior relationship of mandible (chin)
Y-axis angle	65.8±4.2	63.85	Relatively normal anterior-posterior relationship of chin
SN-GoGn	32.5±5.2	30.53	Tends to average angle
FH-MP	27.3±6.1	23.47	Tends to average angle
Po-NB	1.0±1.5	-1.77	Relatively retracted chin
U1-SN	105.7±6.3	114.06	Upper incisor relative lip tilt
U1-NA	22.8±5.7	34.05	Upper incisor relative protrusion (lip tilt)
UI-NA	5.1±2.4	10.29	Upper dental arch (upper incisor) relative protrusion
L1-MP	92.6±7.0	109.15	Lower incisor relative lip tilt
L1-NB	30.3±5.8	39.13	Lower incisor relative protrusion (lip tilt)
LI-NB距	6.7±2.1	9.61	Lower dental arch (lower incisor) relative protrusion
U1-L1	124.2±8.2	105.61	Anterior dental arch protrusion is relatively small

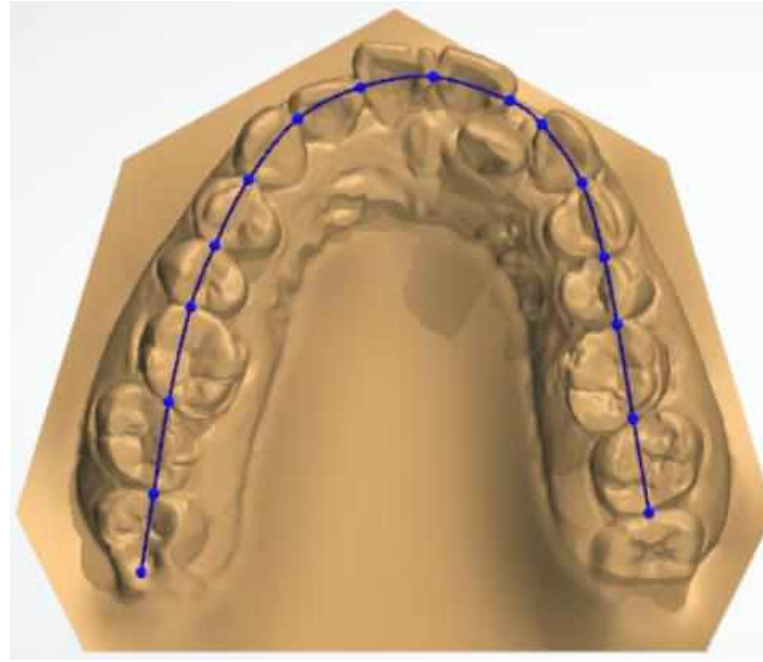
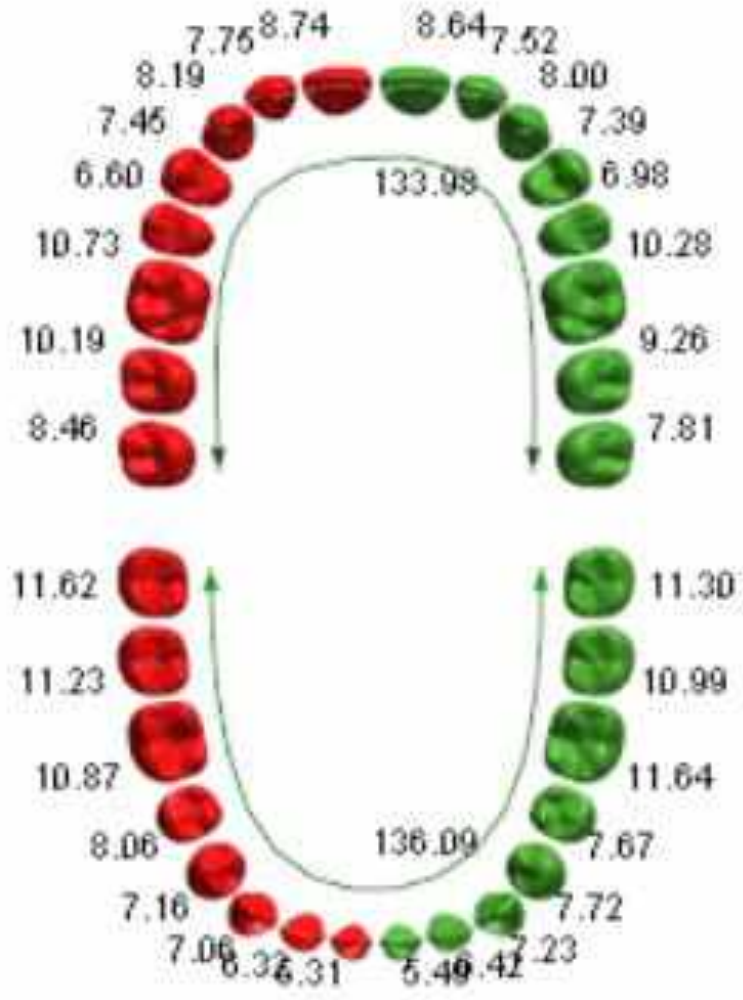


Model Analysis

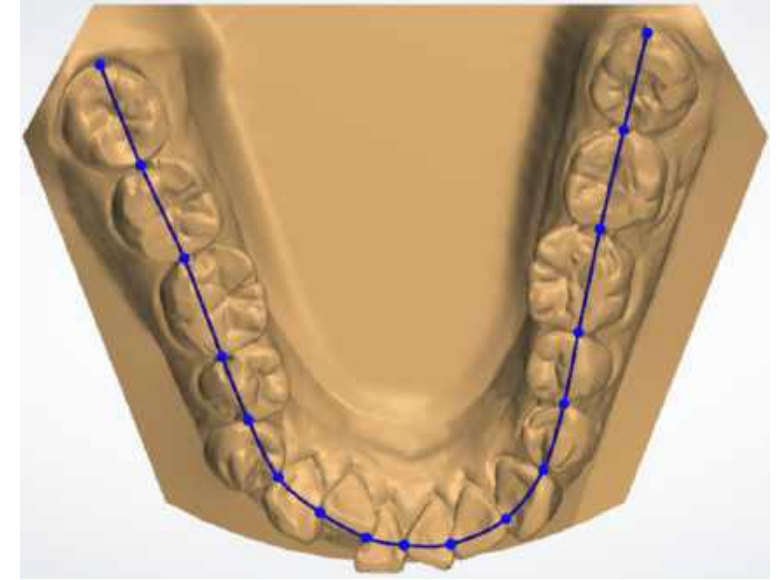
Jaw curve : $(3.45 + 4.18) / 2 + 0.5 = 4.315 \text{ mm}$



Model Analysis-Tooth Width



Length of maxillary dental arch : 117.24mm



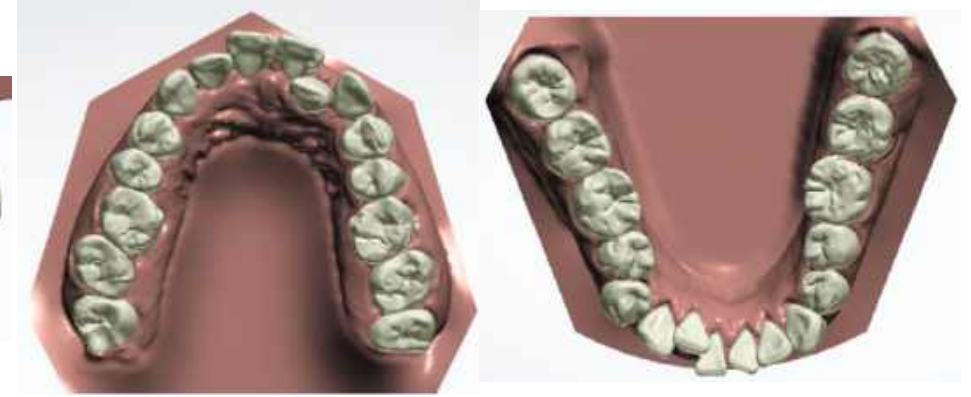
Current length of mandibular dental arch : 126.10mm

(Maxillary) dental arch crowding= $(133.98 - 7.81) - 117.24 = 8.93\text{mm}$
Dental arch crowding= $136.09 - 126.10 = 9.99\text{mm}$

Bolton Index Analysis

Upper 3-3 width	49.14	Lower 3-3 width	37.60	Bolton index	Normal value	Measurements	Remark
				Bolton6	78.8±1.72%	77%	Bolton index of anterior teeth is normal Bolton index of all teeth is normal
Upper 6-6 width	97.79	Lower 6-6 width	91.39	Bolton12	91.5±1.51%	93%	

Diagnosis

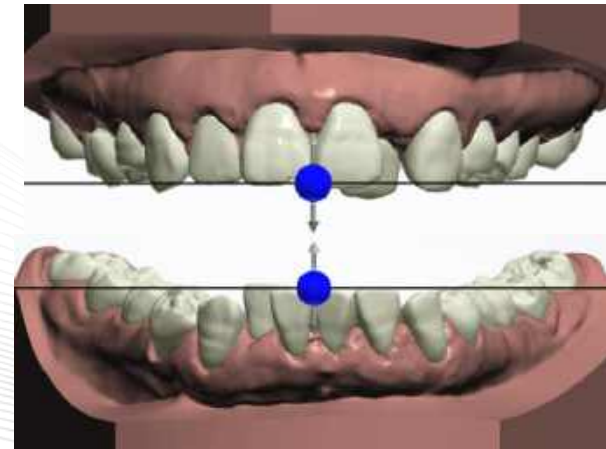


Model diagnosis:

- Deep overbite and overjet of anterior teeth of degree I;
- Class I relationship between canines and molars;
- Depth of Spee curve is 4.315mm;
- Crowding of maxillary arch is 8.93mm, and crowding of mandibular arch is 9.99mm;
- Bolton index of anterior teeth and all teeth is normal;
- Crossbite of 22, 43 and opposing teeth, and defects of maxillary and mandibular posterior teeth;
- The midline of maxillary anterior teeth is coordinated with the midline of the face, and the midline of mandibular anterior teeth is 3.7mm to the right of the midline of maxillary anterior teeth.

Treatment plan:

- **[Extract 18, 28, 38, 48 wisdom teeth for correction.]**
- Move the left maxillary posterior teeth distally, expand the maxillary posterior teeth on the right side, retract 17 and 27, slightly retract and twist 11 and 21, lip tilt 12 and 22, coordinate the curvature of the maxillary dental arch and the occlusal relationship of the posterior teeth.
- Expand the mandibular posterior teeth slightly, lip tilt 42, retract and twist the remaining mandibular anterior teeth, do a small amount of proximal deglazing on the right mandibular anterior teeth, slightly lower the mandibular anterior teeth, vertically straighten the mandibular premolars distally, retract and twist 44, vertically straighten 45, flatten the Speed curve, and coordinate the curvature of the mandibular dental arch;
- Coordinate the curvature of the upper and lower mandibular dental arches to stabilize the occlusal relationship of the upper and lower mandibular posterior teeth;
- Move the midline of the maxillary anterior teeth slightly to the right.



Tooth Movement Data Sheet (Upper/Lower Jaw) – Stage: 45

牙齿移动概览									
	倾斜	成角	旋转	左/右	前进/后退	挤出/侵入	牙齿长轴角度	IPR 远中	IPR 近中
18									
17				-1.1 mm	-0.4 mm	-0.2 mm	81.8 度		
16	6.0 deg	0.0 deg		-0.1 mm	1.0 mm		85.5 度		
15	5.0 deg			-0.4 mm	-0.3 mm	0.4 mm	79.3 度		
14	6.0 deg	0.0 deg		-0.6 mm		-0.4 mm	76.8 度		
13	2.0 deg			-0.9 mm		0.2 mm	69.8 度		
12	5.0 deg	-17.0 deg	16.0 deg	-0.8 mm	0.0 mm	-0.4 mm	60.2 度		
11	-4.0 deg	-3.0 deg	11.0 deg	0.0 mm	0.0 mm	0.0 mm	62.6 度		
21		3.0 deg	-10.0 deg		-0.3 mm	0.0 mm	65.7 度		
22	21.7 deg	-8.0 deg	10.0 deg	-0.3 mm	0.3 mm	0.9 mm	68.5 度		
23	-2.0 deg	-10.0 deg	10.0 deg	-0.2 mm	0.0 mm	1.0 mm	70.5 度		
24		-3.0 deg	7.0 deg	-1.5 mm	-0.4 mm	0.6 mm	87.1 度		
25	6.0 deg	-7.0 deg		-0.7 mm	-1.5 mm	0.6 mm	80.5 度		
26	1.0 deg	0.0 deg	8.0 deg	-1.9 mm	-0.6 mm	0.3 mm	74.4 度		
27	-4.0 deg		6.0 deg	-1.9 mm	-1.0 mm	-0.2 mm	82.4 度		
28									
38									
37		-9.0 deg		0.0 mm	-1.0 mm	0.3 mm	75.1 度		
36	3.0 deg	1.0 deg		-2.2 mm	0.0 mm	0.5 mm	67.8 度		
35		-6.0 deg		-0.3 mm		0.6 mm	56.3 度		
34	0.0 deg	-7.0 deg		-0.5 mm	-0.5 mm		75.3 度		
33	-2.0 deg	-3.0 deg	-9.0 deg	-1.6 mm	-0.7 mm	0.6 mm	68.1 度		
32	5.0 deg	0.0 deg		-0.9 mm	-1.6 mm	1.1 mm	62.6 度		
31	2.0 deg	-5.0 deg	34.0 deg	0.9 mm	-0.9 mm	0.8 mm	61.4 度		
41	1.0 deg	2.0 deg	8.0 deg	-0.1 mm	-1.1 mm	1.5 mm	61.3 度		
42	11.0 deg			-0.5 mm	1.9 mm	0.9 mm	61.8 度		
43	-3.0 deg	-5.0 deg		-0.2 mm	-0.7 mm	0.3 mm	72.0 度		
44		-9.0 deg	-20.0 deg	0.0 mm	-0.6 mm	0.2 mm	67.2 度		
45	22.0 deg	-4.0 deg		-1.7 mm	0.8 mm	1.3 mm	70.3 度		
46	1.0 deg			-2.1 mm	0.8 mm	1.2 mm	56.8 度		
47	-0.9 deg	-7.0 deg	12.0 deg	-0.8 mm	-0.8 mm		72.4 度		
48									

Note: Estimated duration: 560 days.
About one year and six months

Model pictures

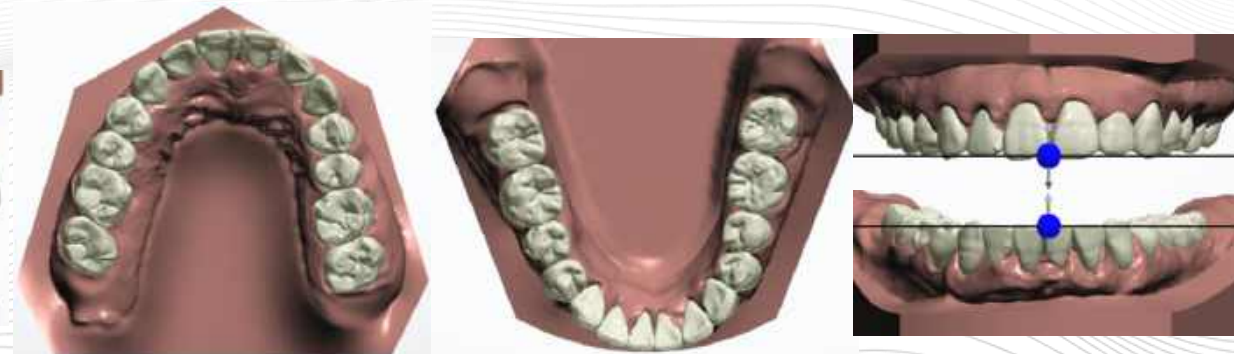
Treatment plan:

- [Extract 18, 28, 38, 48 wisdom teeth for correction.]
- Move the left maxillary posterior teeth distally, expand the maxillary posterior teeth on the right side, retract 17, 27, slightly retract and twist 11, 21, lip tilt 12, 22, and coordinate the curvature of the maxillary dental arch and the occlusal relationship of the posterior teeth.
- Lip tilt 42, retract and twist the remaining mandibular anterior teeth, do a small amount of proximal deglazing on the right mandibular anterior teeth, slightly lower the mandibular anterior teeth, vertically straighten the mandibular premolars distally, retract and twist 44, vertically straighten 45, flatten the Speed curve, and coordinate the curvature of the mandibular dental arch;
- Coordinate the curvature of the upper and lower mandibular dental arches to stabilize the occlusal relationship of the upper and lower mandibular posterior teeth;
- Maintain the midline of the maxillary anterior teeth.

Before correction

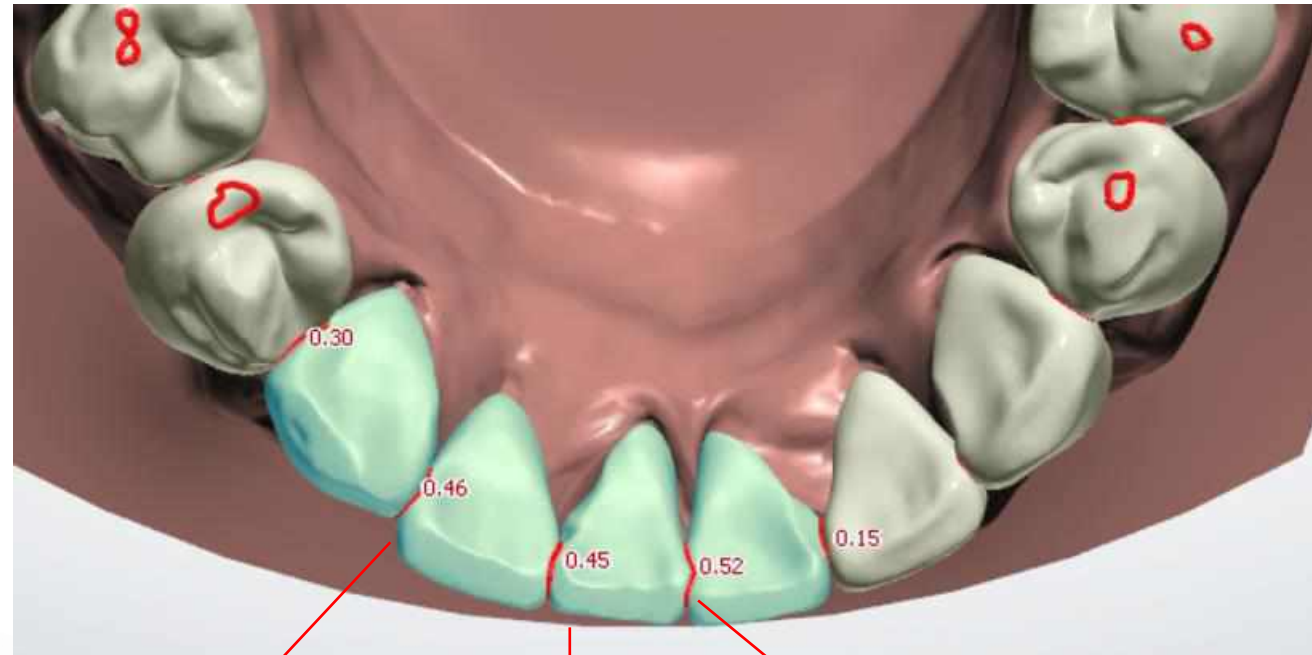


After correction



Interproximal Surface Removal (IPR) Data Sheet

【Jaw】



Issue 35, between 42 and 43 : 0.46mm

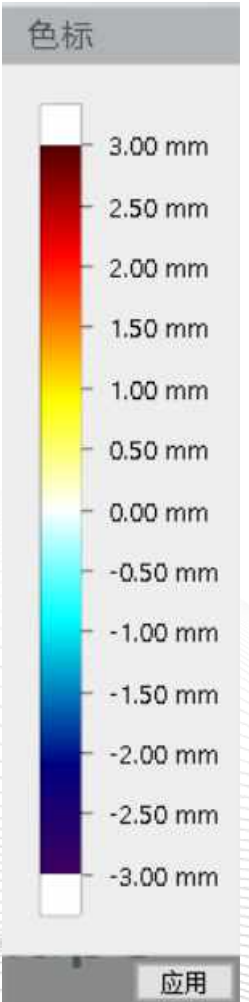
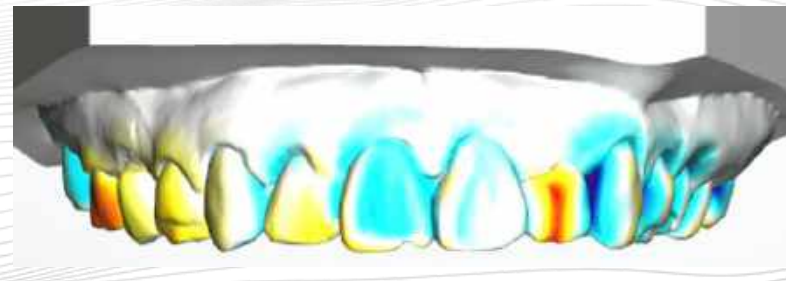
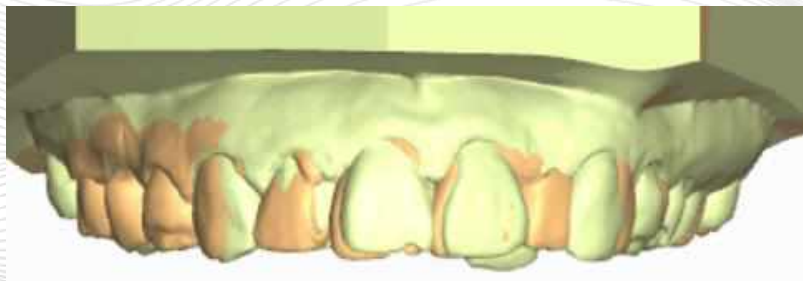
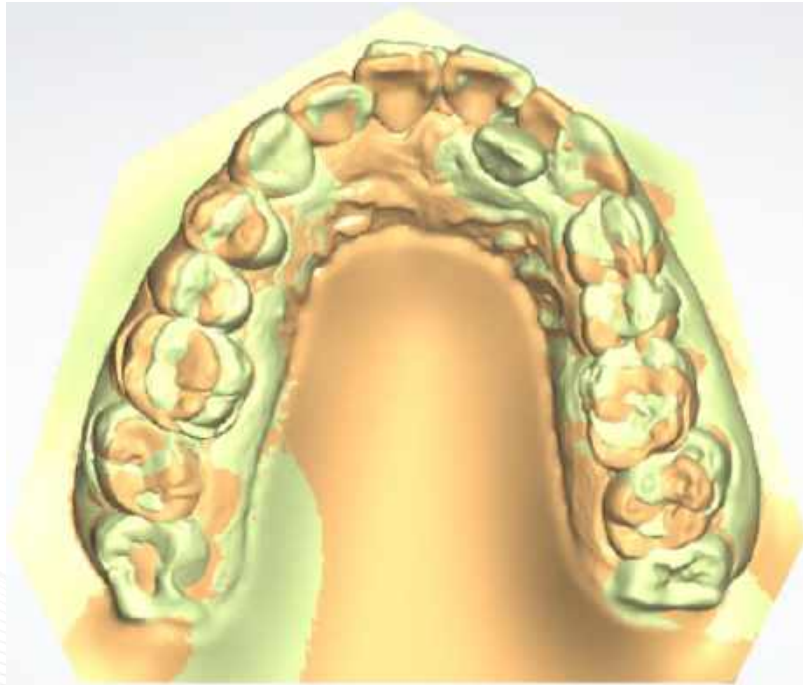
Issue 35, between 31 and 41 : 0.52mm

Issue 35, between 42 and 41 : 0.45mm

Comparison of models before and after correction

【Maxilla】

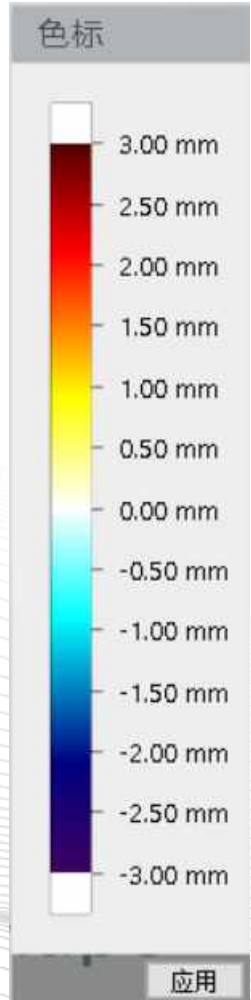
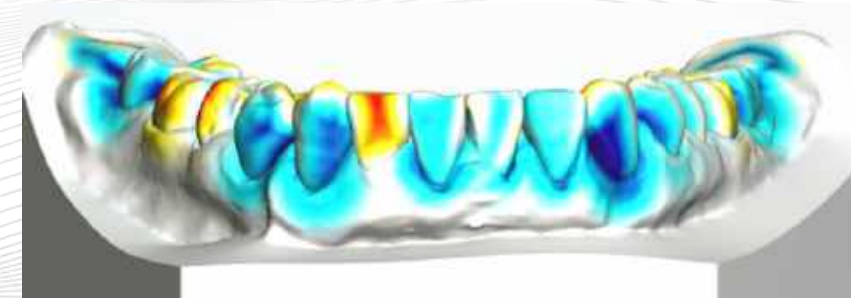
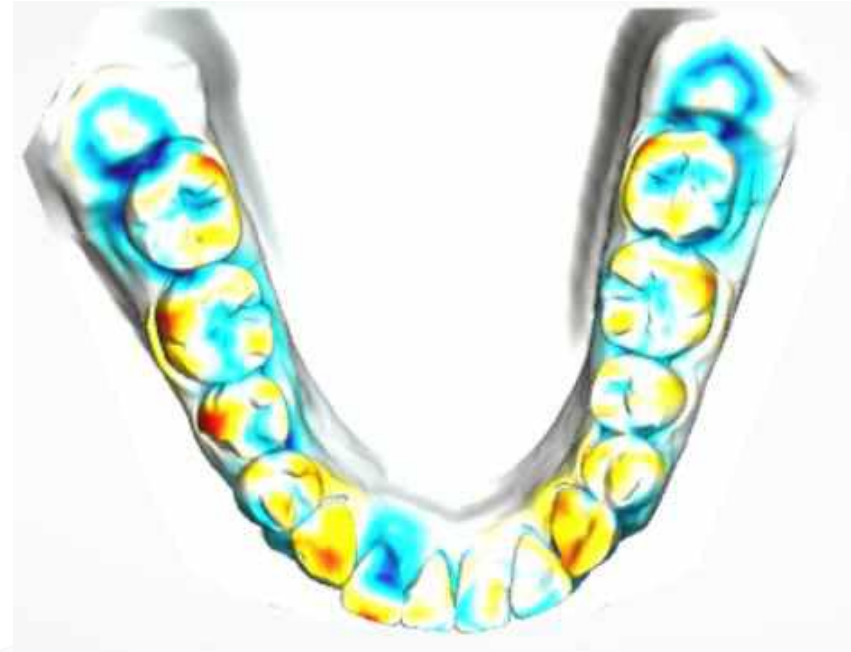
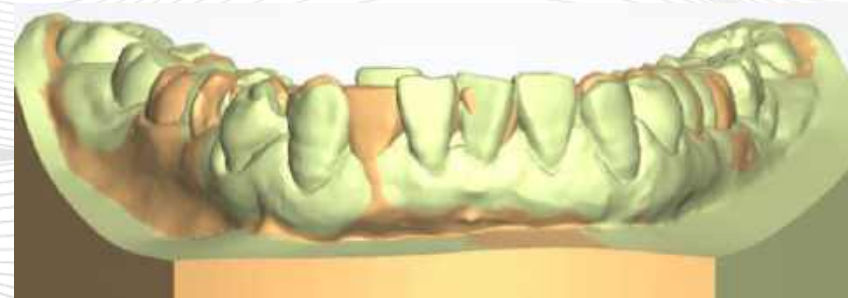
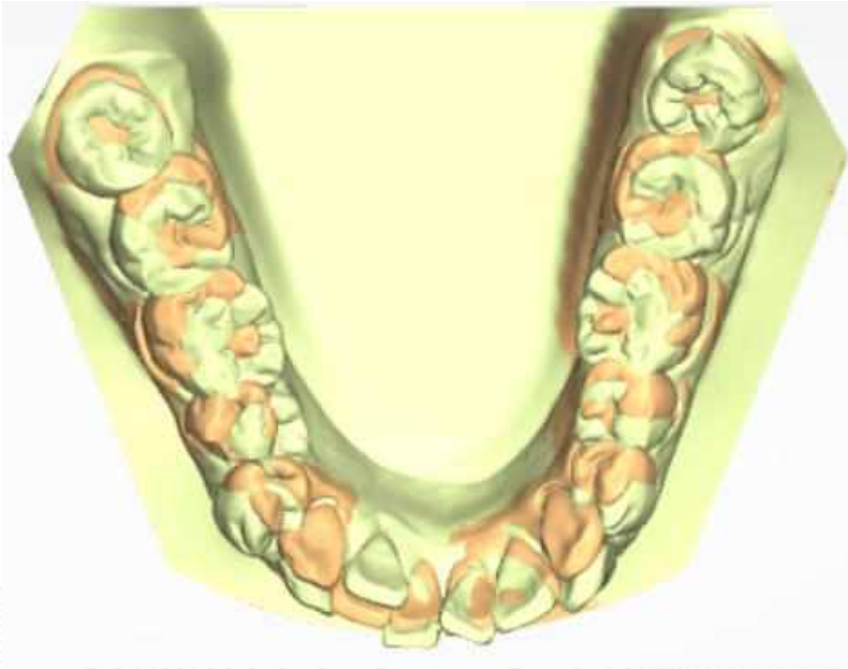
Light green-before correction
Ochre-after correction ;



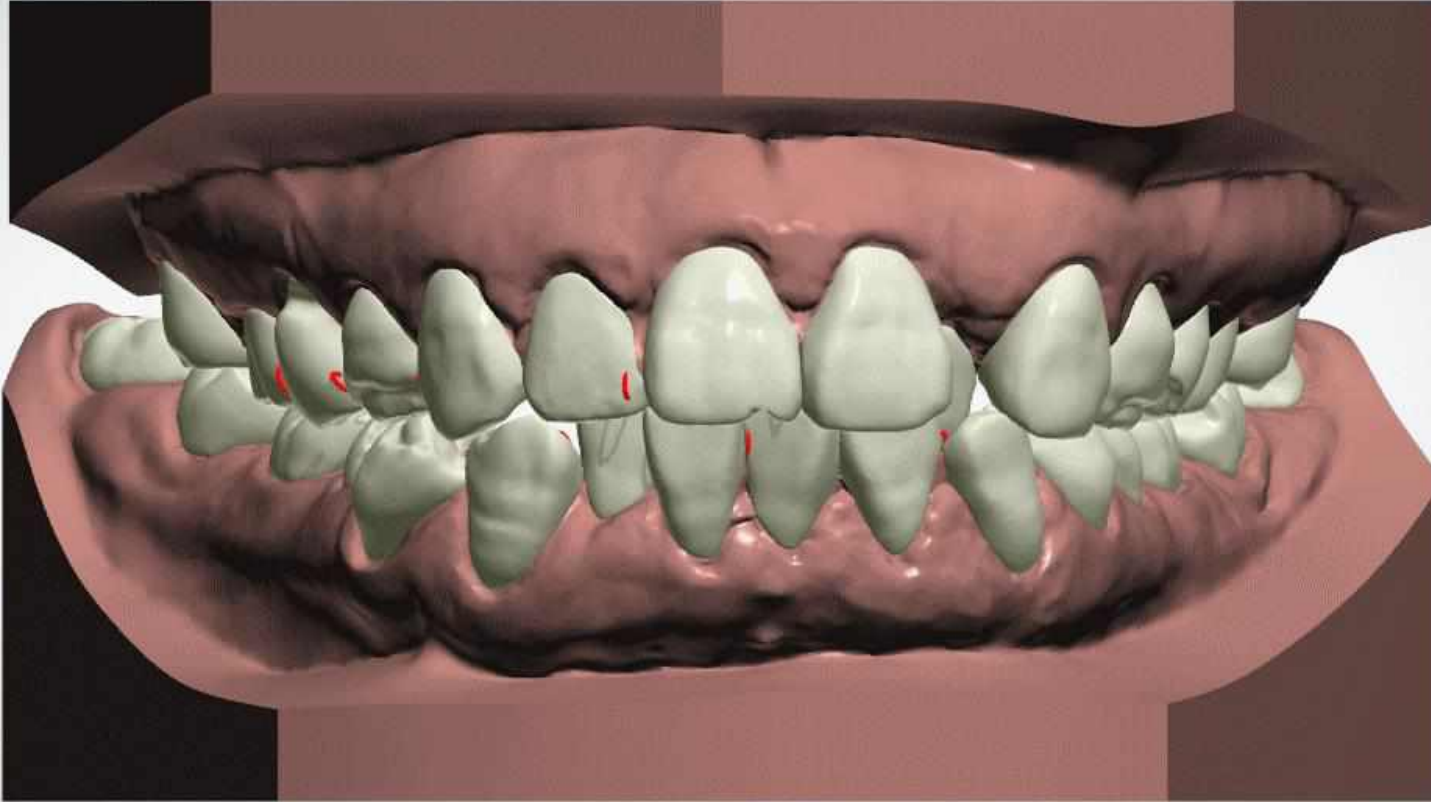
Comparison of models before and after correction

【JAW】

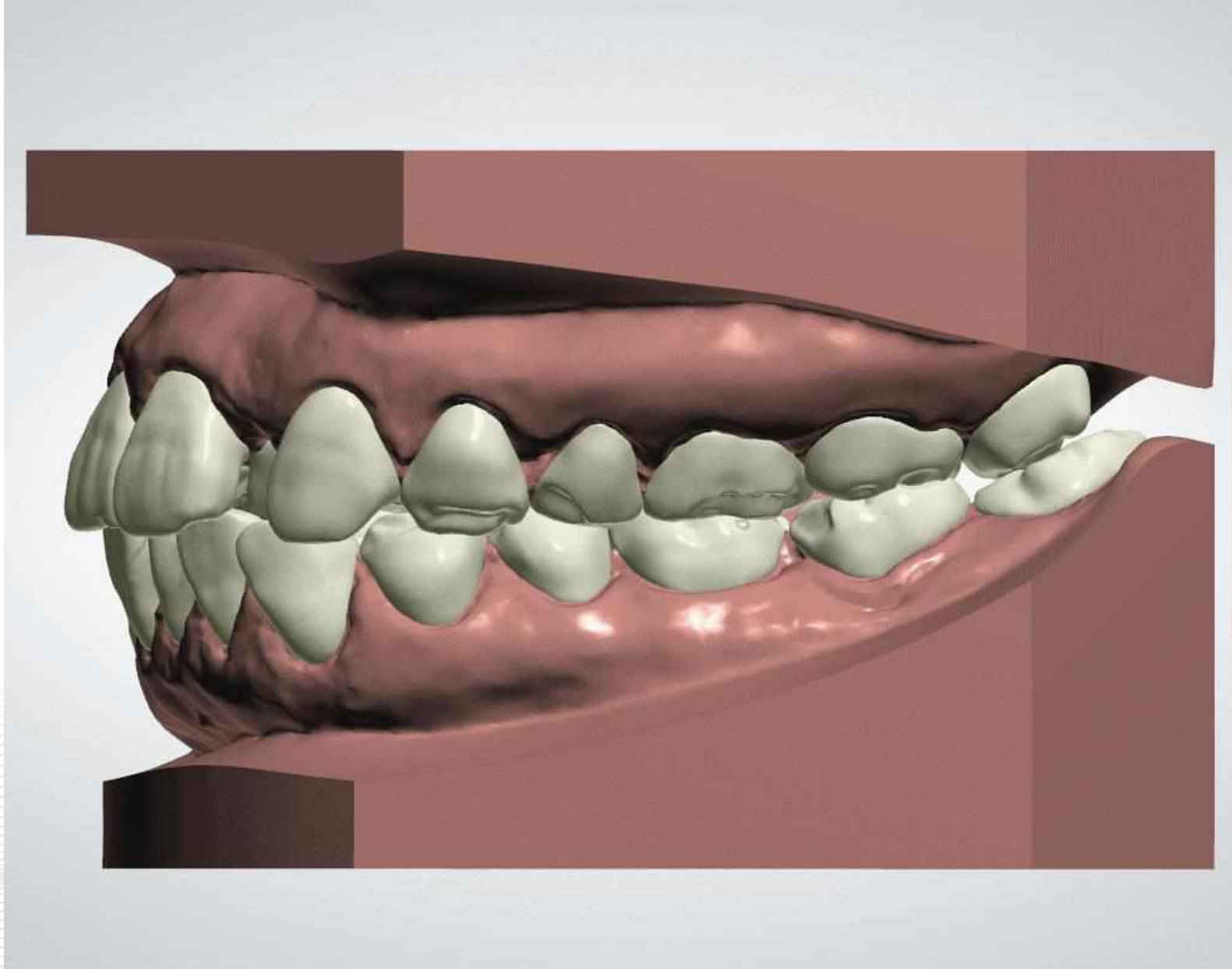
Light green-before correction
Ochre-after correction ;



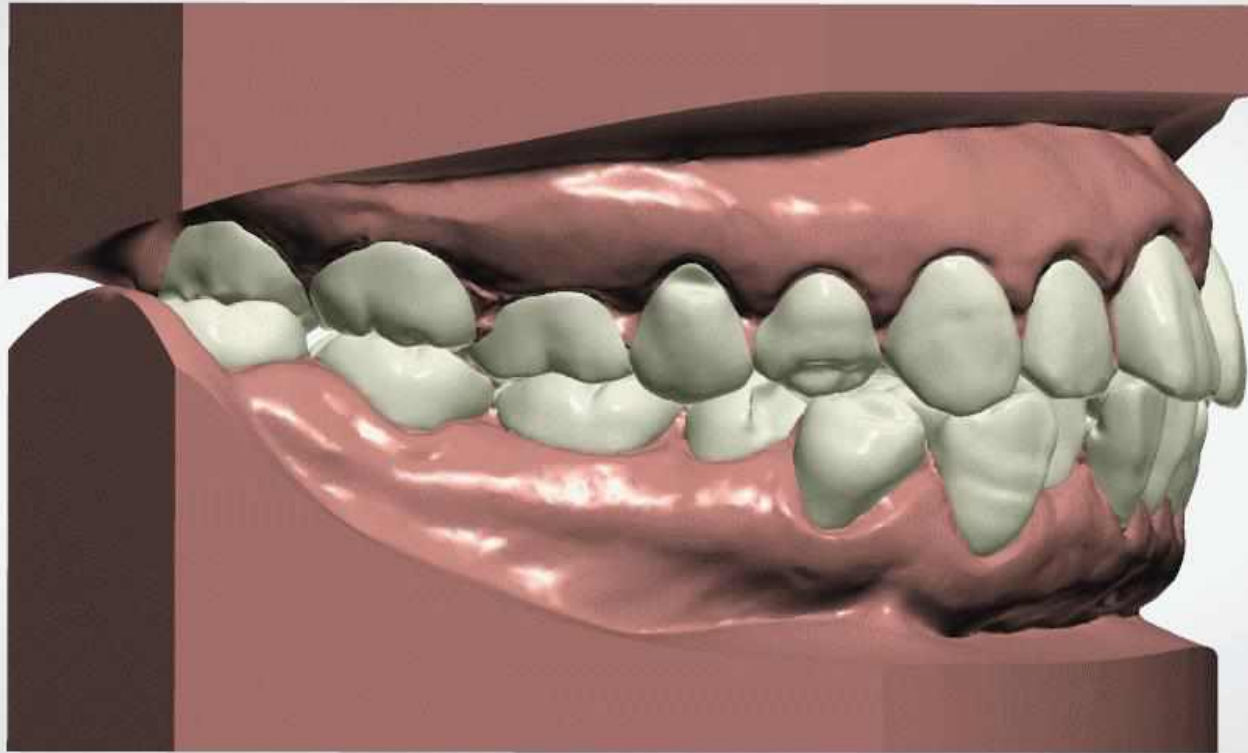
Corrective Design Animation



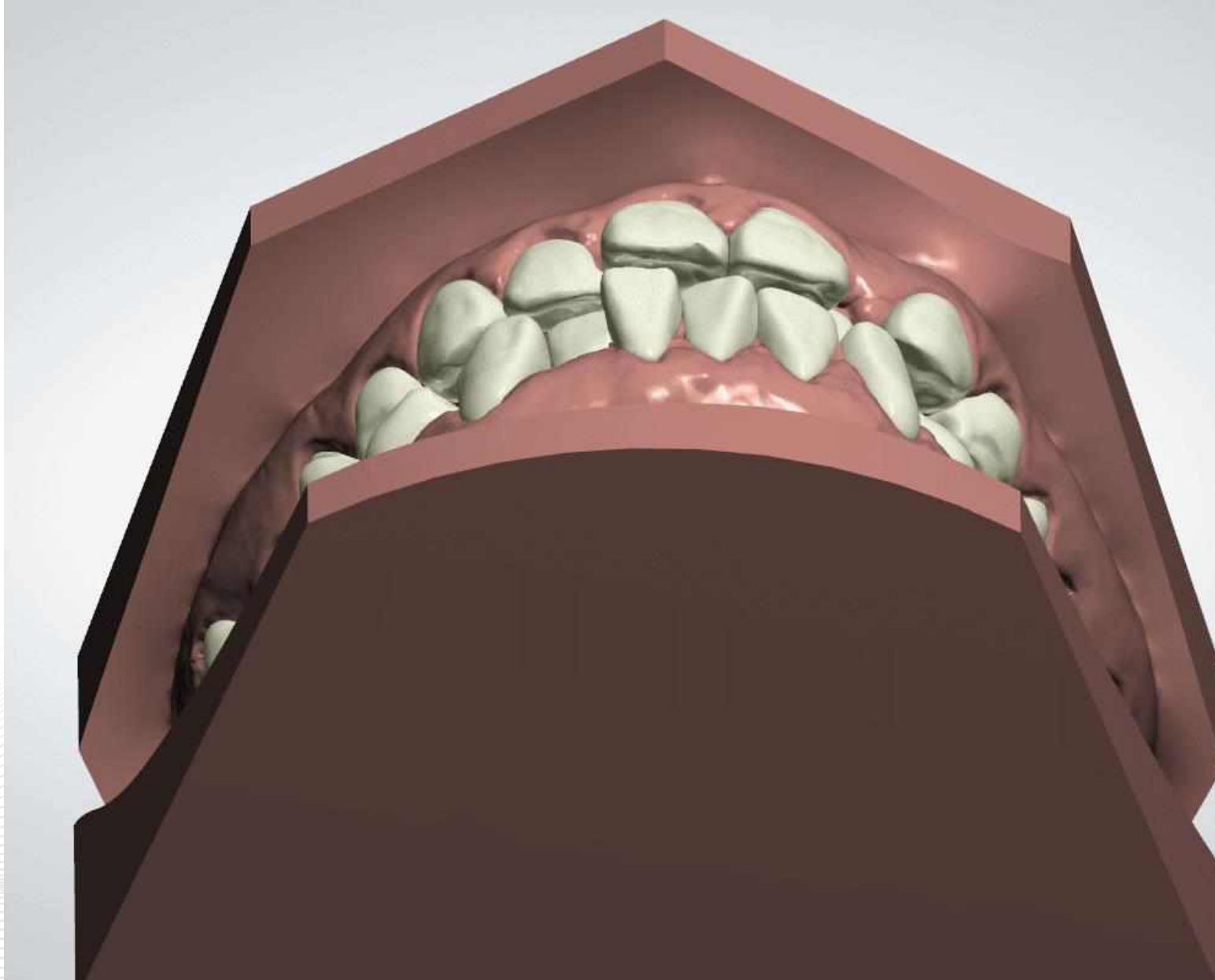
Corrective Design Animation



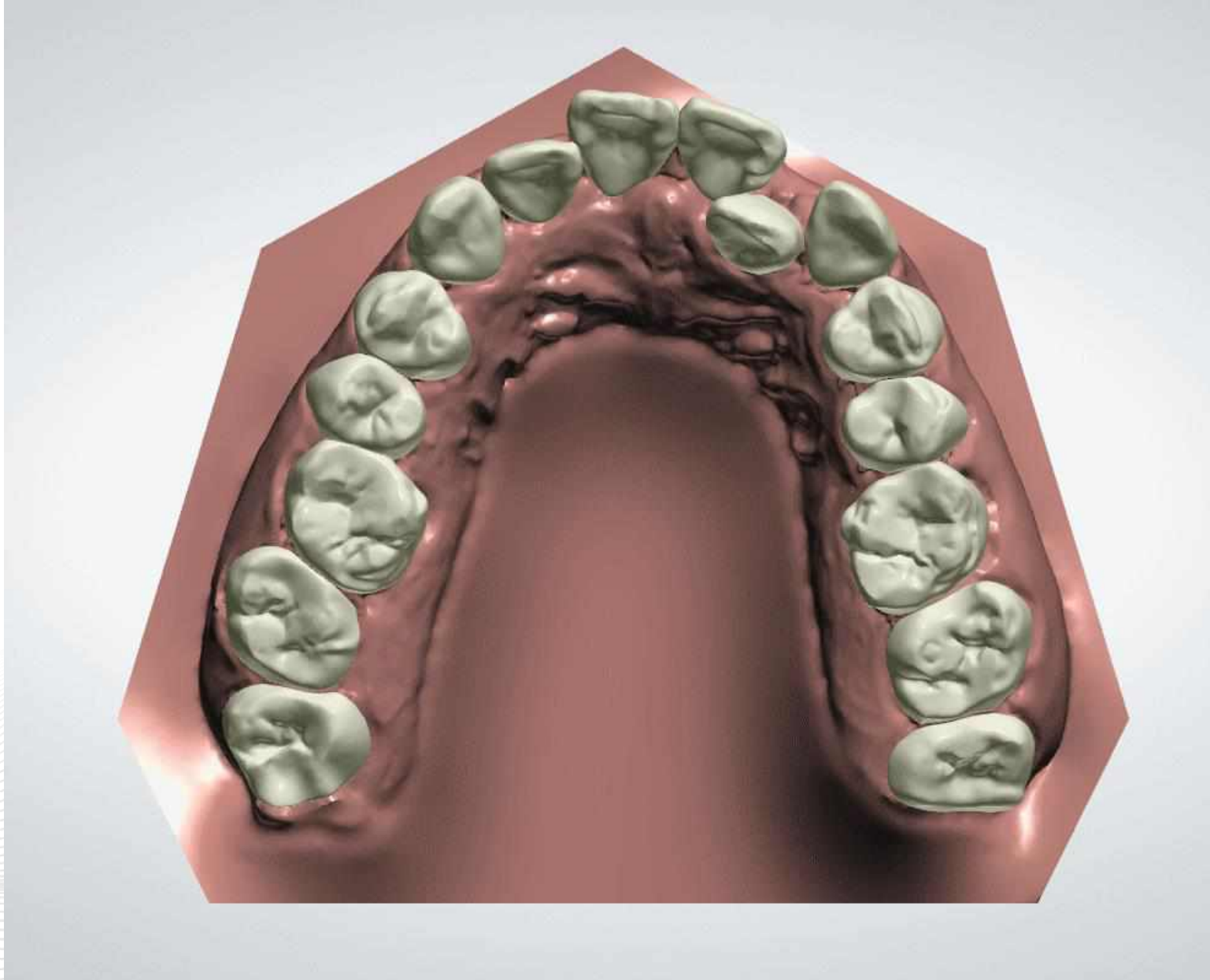
Corrective Design Animation



Corrective Design Animation



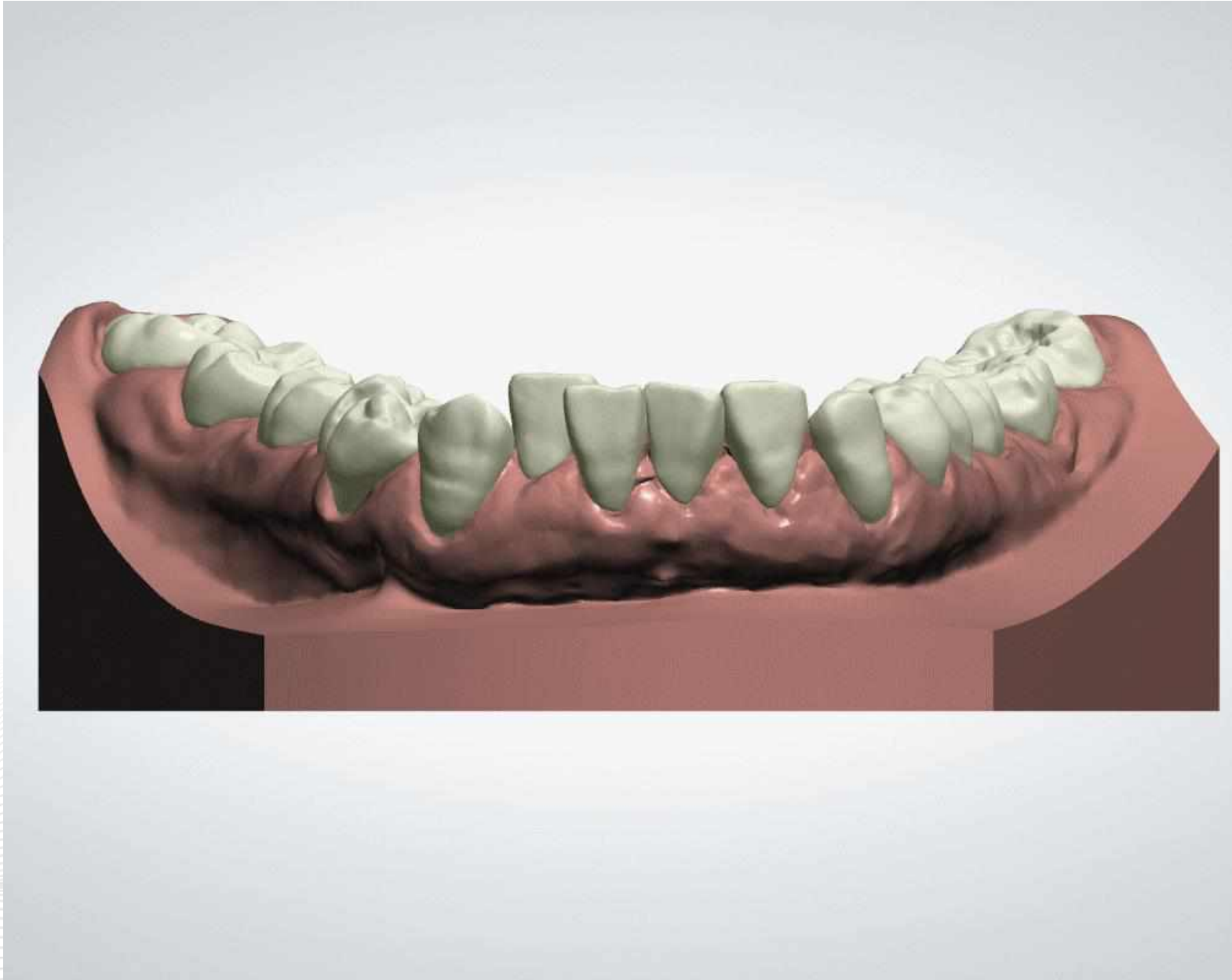
Corrective Design Animation



Corrective Design Animation



Corrective Design Animation



Orthodontic treatment Tips

Dear customer (or customer guardian):

We will provide you with high-quality digital invisible orthodontic services. In order to ensure that the invisible braces can achieve the expected results, it is necessary for you to have a correct understanding of the relevant matters of the correction process. Your good cooperation is the key to the success of the correction. Please read the following content in detail.

Dentomaxillary deformity is a developmental deformity of children. Correcting teeth is to move the teeth growing in the alveolar ridge to the normal position. This is a biological reconstruction process, so the treatment course is relatively long. Generally, the treatment of dentomaxillary deformity in deciduous teeth and replacement teeth takes about 6-18 months, and the treatment in the permanent teeth period takes about 2 years. Difficult patients and special cases require longer time.

At the first visit, the customer (or customer guardian) should clearly state the main problems that need to be solved to the doctor; during the treatment process, if the patient arbitrarily asks the doctor to change the treatment plan and goals, the adverse consequences or results caused by the patient shall be borne by the patient.

Correction requirements

Read carefully: Please read the instructions for use of customized bracketless invisible braces carefully. If you have any questions, please consult your doctor.

Wearing instructions: Please read the instructions for use of invisible braces carefully before using them, so as to have a full understanding of the removal, cleaning, and storage of invisible braces.

1. Wearing time:

1. Please strictly follow the doctor's advice and wear and replace the braces in the order of the braces numbers. Under normal circumstances, you need to wear the braces for more than 20 hours a day. Except for eating, brushing teeth, etc., you need to wear them at other times.

2. Do not wear invisible braces in an unordered manner, otherwise the expected correction effect cannot be achieved, and unpredictable adverse conditions will occur.

Retention of braces: Please be sure to keep at least 2 pairs of braces that have been used recently, and store them in the brace packaging bag according to the corresponding serial number. If the brace you are wearing is accidentally lost, damaged, or the brace cannot be put in place, etc., you need to wear the brace with the previous serial number first, and then contact your doctor.

2. When wearing the braces, you should pay attention to the following matters:

1. Eat rice as the staple food, cut the fruit into small pieces before eating, and avoid chewing the following foods and items:

(1) Too hard: ribs, crabs, chicken legs, nuts, pine nuts, pencils, chopsticks, etc.;

(2) Too tough and sticky: biscuits, beef jerky, ice cream, kebabs, fried foods, rice cakes, chewing gum, milk candy, etc.;

2. Brush your teeth with warm water after meals;
3. Follow the doctor's advice and follow up on time. If you find that the accessories of the braces fall off, you should come to the hospital for treatment in time, otherwise you will bear the consequences;
4. Discomfort, mild toothache, oral ulcers, etc. within one month of wearing the braces for the first time are normal reactions, which can be relieved by yourself after gradual adaptation.
5. When wearing the braces for the first time, you may experience mild foreign body sensation, pronunciation discomfort, increased saliva secretion, etc.
6. After each replacement of the braces, you may experience toothache, looseness, and chewing weakness, which are normal reactions and usually will be alleviated or disappear after 3-4 days. If you have other serious discomfort, please contact your doctor in time.
7. Very few patients may experience symptoms of discomfort in the temporomandibular joint, such as clicking and pain. The incidence of temporomandibular joint disease (TMD) in orthodontic patients is the same as that of TMD in the general population. Therefore, conventional orthodontic treatment can neither cause nor prevent the occurrence of TMD. If you have the above situation, please contact and consult a clinician in time.
8. In order to achieve the expected effect, the clinician will paste resin attachments on the tooth surface to assist tooth movement. If you refuse to paste, it will affect the correction effect. If the attachment falls off during the correction, please contact the doctor in time to re-paste.
9. After the correction, you need to wear a retainer to avoid recurrence.
10. If caries, enamel decalcification, tooth fracture, pulp necrosis, tooth blackening, root resorption, gingival atrophy, and alveolar bone resorption occur due to the patient's careless brushing or calcium deficiency, please contact the doctor in time.
11. For marginal cases that are treated with tooth extraction, orthodontic treatment can be performed based on the preliminary diagnosis, and then the diagnosis can be clarified through observation of the correction reaction. Therefore, it is entirely possible to modify the correction plan during the correction process for such patients. Please understand;
12. For patients with skeletal malocclusion who have passed the peak of growth and development, orthodontic treatment can only improve the facial shape by concealing the correction method, and cannot achieve the purpose of correcting skeletal deformities. Please understand.
13. Risks: During orthodontic treatment, unexpected situations beyond the control of the doctor may occur, such as root resorption (especially short-rooted teeth, teeth that have been traumatized, teeth that have received endodontic treatment or teeth with root resorption), pulp necrosis, etc. A few patients' teeth may not be able to move due to the presence of hard-to-find root bone adhesions, making it impossible to complete the treatment plan. Long-term overlapping teeth lack interproximal gingival tissue, and after alignment, a "black triangle" gap appears between the necks of the teeth, affecting the appearance.
14. When the patient's teeth are not proportional, invisible braces, like fixed braces, may require some teeth to be deglazed on the adjacent surfaces and enlarged in order to adjust the occlusal relationship.
15. The doctor's design plan takes into account the patient's requirements, health, beauty, function, stability and personal conditions. It may not meet all your requirements and special preferences, but we will do our best to provide you with the best treatment effect that can be achieved at the current medical level.
16. The doctor's treatment plan needs to be communicated with the patient. After the patient agrees, the doctor submits the plan to the system. Once submitted, the system will automatically go into production and the plan cannot be modified. If the patient wants to change the plan for personal reasons or interrupt the treatment, no refund will be given.

5. About the cost of correction:

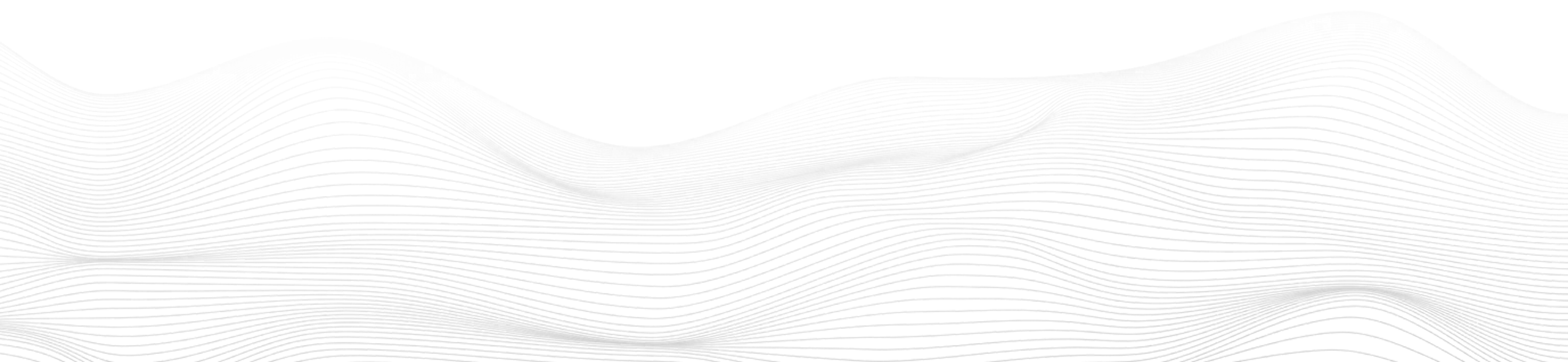
The cost of orthodontic treatment is your investment in health and beauty. If the appliance is damaged, lost, or the treatment plan is changed due to the patient's own reasons, additional fees will be charged. If the payment cannot be made as agreed, it will be regarded as automatic abandonment of correction. The paid fees will not be refunded. All consequences arising from this will be borne by the patient. The cost of invisible correction does not include X-rays, photography, tooth extraction, removable devices, extraoral devices, retainers, etc. The final cost is subject to the doctor's prescription. .

★ I have read the above content carefully, and the doctor has explained the unclear points clearly. I will seriously follow the above precautions, otherwise all consequences caused by my own reasons will be borne by me; at the same time, I also understand that the above problems may occur during orthodontic treatment and agree to the treatment.

Patient (or guardian) signature:

Contact number:

Year Month Day



Thanks for watching

