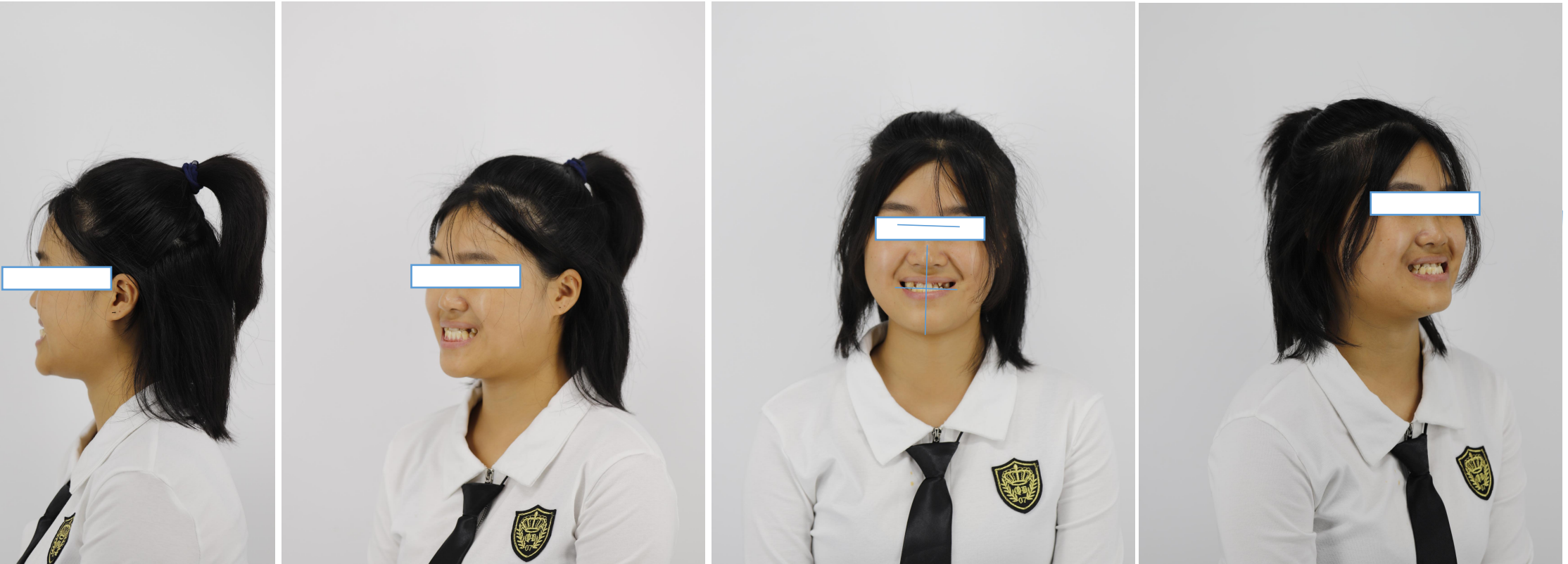




Analysis and design of invisible correction

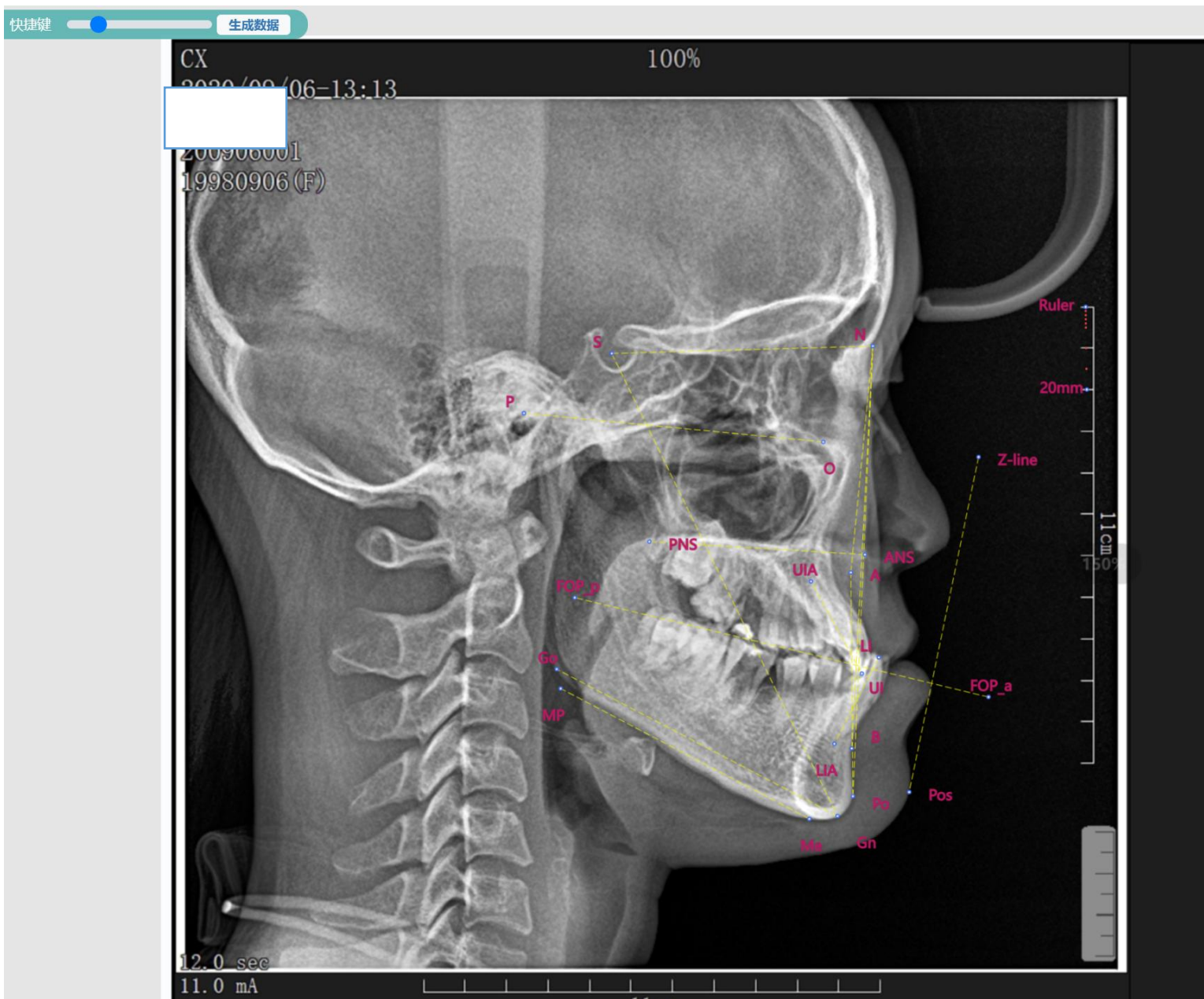
Smiling picture



【Microfacies inspection】

1. Concave type;
2. The front teeth can be reversed when smiling;
3. When smiling, maxillary anterior teeth are crowded, maxillary anterior teeth are under-exposed, and mandibular anterior teeth are over-exposed;
4. It can be seen that the midline of maxillary anterior teeth is to the right of the midline of the plane.

Cephalometrics



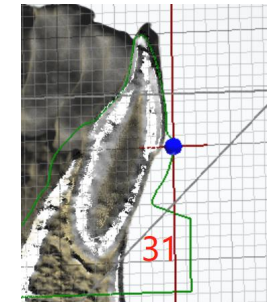
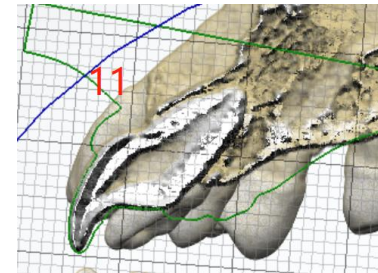
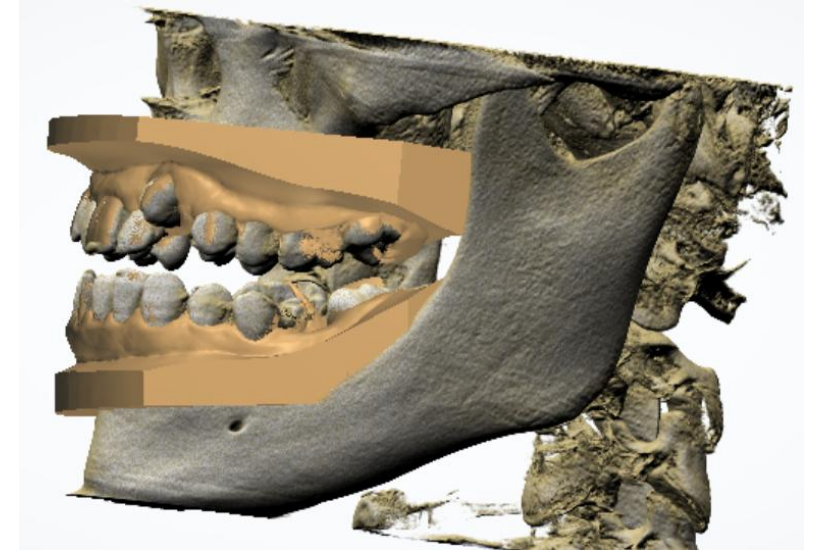
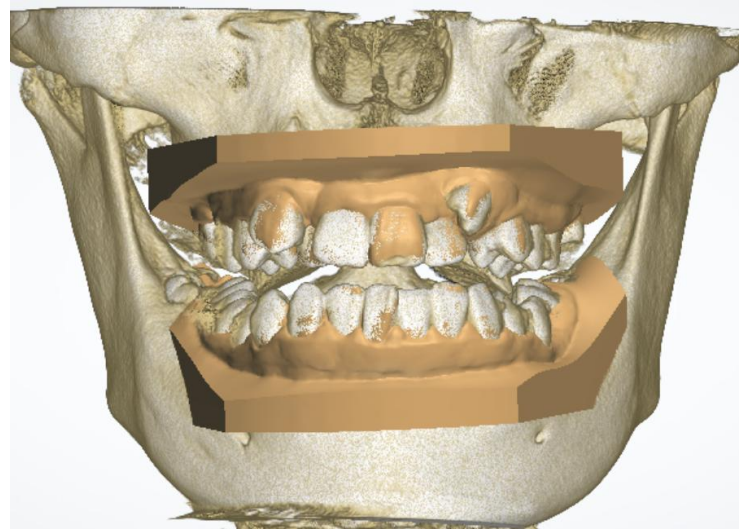
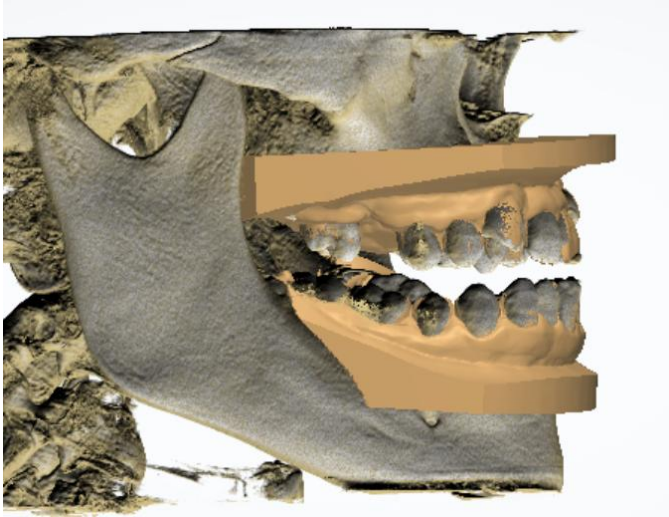
综合诊断

骨性III类,低角
上切牙唇倾
下切牙舌倾

项目	标准值	测量值	
ANB	4.7±1.4	坐标已变	骨性III类
Wits	-1.4±2.8	-10.18mm↓	骨性III类
APDI	80.74±4.76	93.75°↑	骨性III类
AB-NPo	-5.9±2.0	坐标已变	骨性III类
MP-FH	31.6±3.9	坐标已变	低角
GoGn-SN	35.8±3.6	坐标已变	低角
Y轴角	65.5±2.9	坐标已变	水平生长型
SGo/NMe	0.62±0.05	0.67	平均生长型
SNA	82.3±3.5	坐标已变	上颌骨突出正常
颌突角	10.3±3.2	坐标已变	面中部后缩
SNB	77.6±2.9	坐标已变	下颌骨前突
面角	83.1±3.0	坐标已变	颈部前突
Po-NB距	0.2±1.3	坐标已变	
U1-NA	22.4±5.2	坐标已变	上切牙唇倾
U1-SN	104.8±5.3	坐标已变	上切牙唇倾
U1-NA距	3.1±1.6	坐标已变	上切牙前突
L1-NB	32.7±5.0	坐标已变	下切牙舌倾
L1-MP	94.7±5.2	坐标已变	下切牙唇倾度正常
LI-NB距	6.0±1.5	坐标已变	下切牙突出正常
U1-L1	122±6.0	坐标已变	

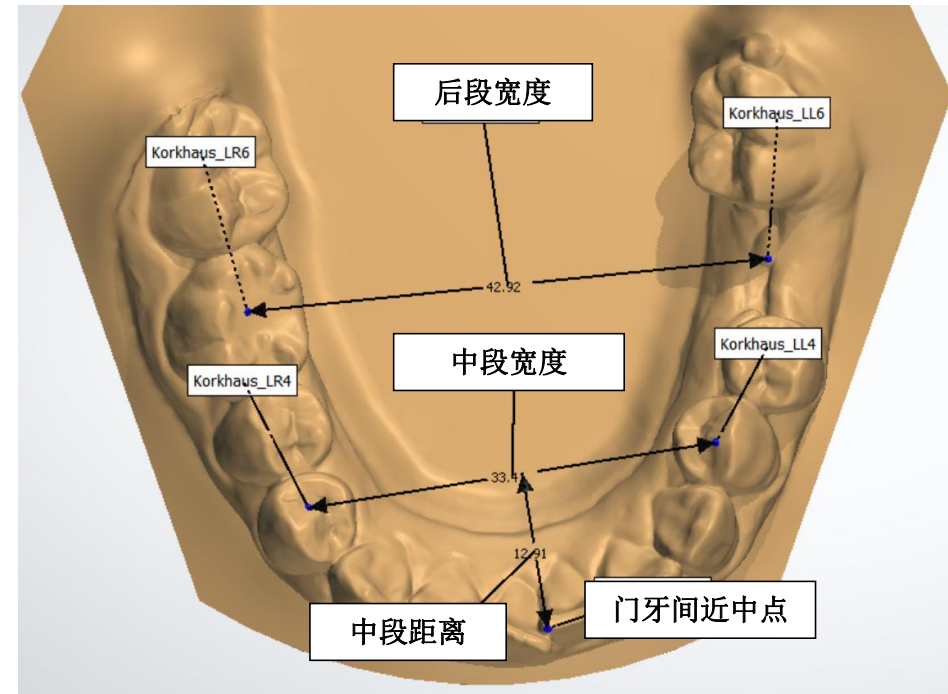
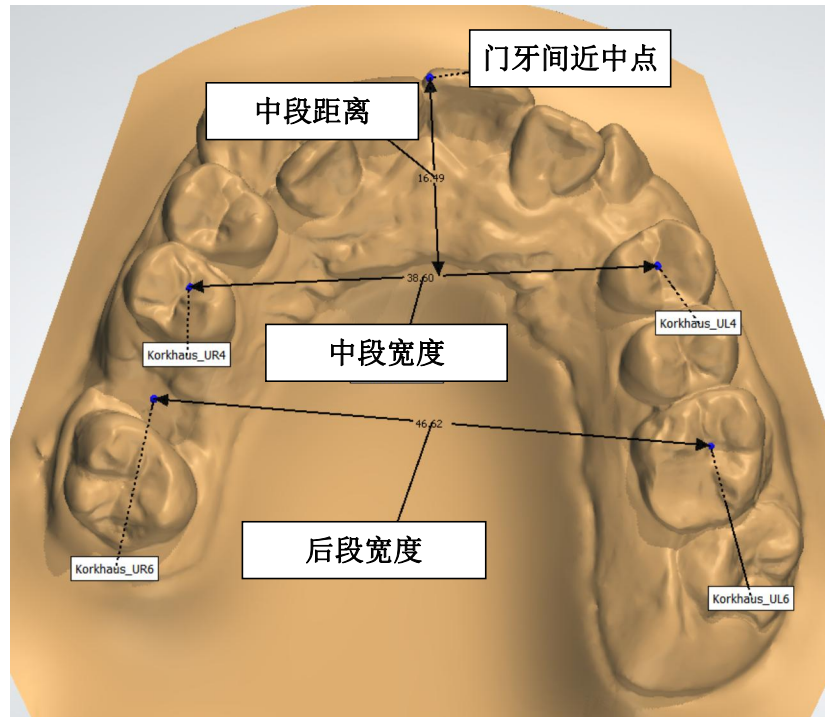
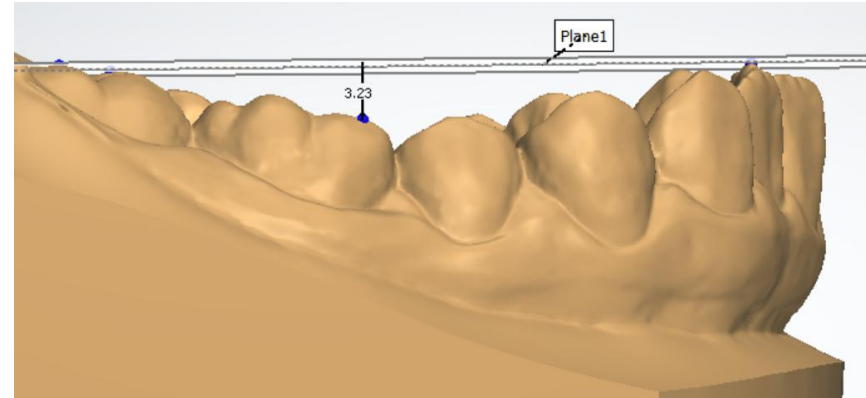
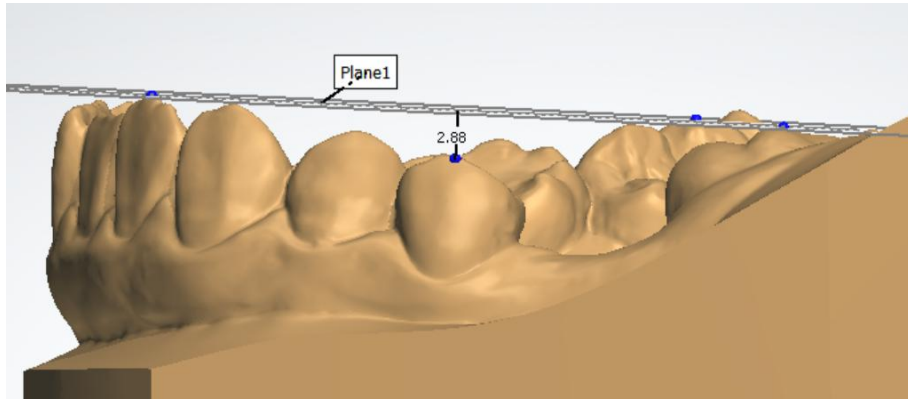
Z角 83.8°
SN-FH 坐标已变
SN 坐标已变
GoMe 坐标已变

CBCT matching and its examination

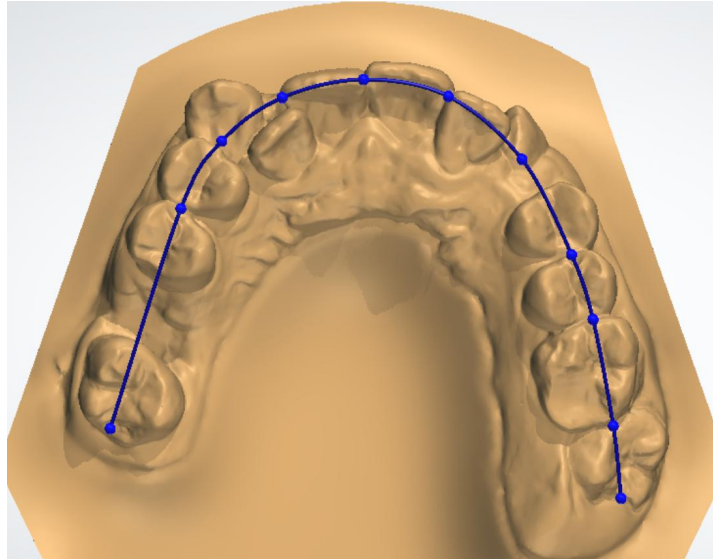
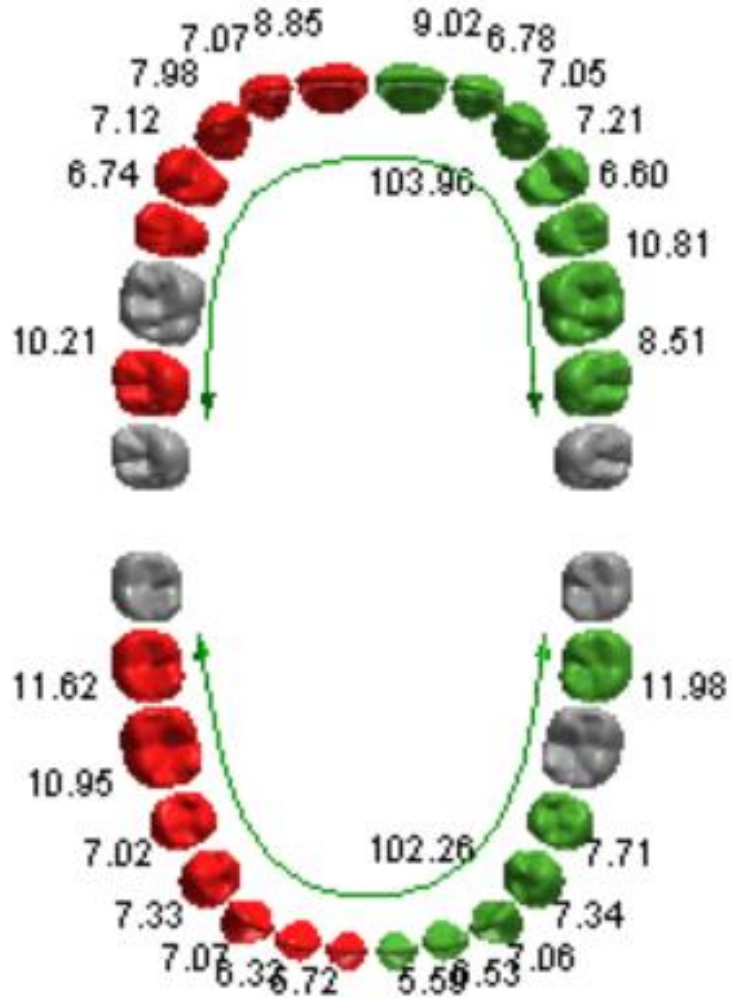


Model analysis

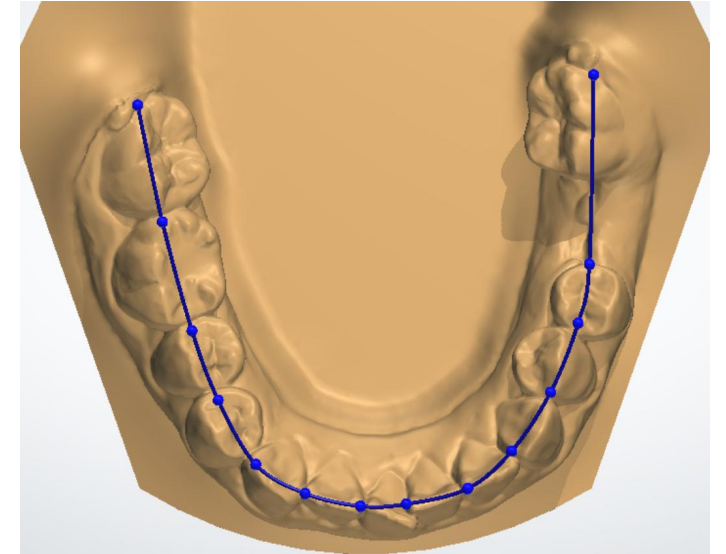
Gnathic curve: $(2.88 + 3.21) / 2 + 0.5 = 3.545\text{mm}$



Model analysis-Tooth width



Maxillary existing arch length: 90.40mm



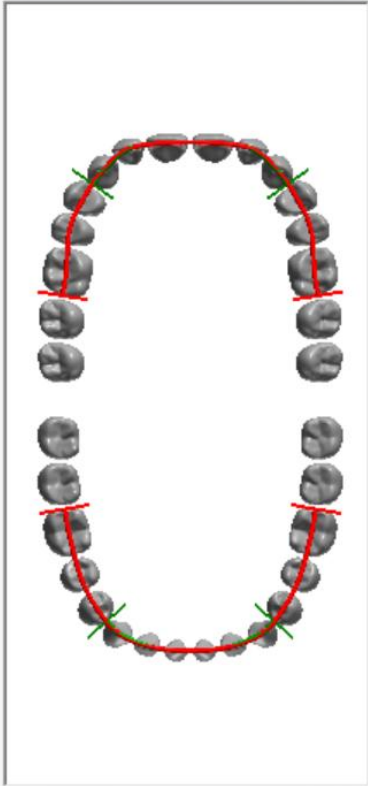
Length of existing mandibular arch:
100.28mm

(maxillary) arch crowding= $103.96 - 103.85 = 0.11\text{mm}$
 (Mandibular) arch crowding= $102.26 - 108.59 = -6.33\text{mm}$

Bolton indices analysis

Analysis reports

Overview



Tooth width analysis

Bolton analysis

Space Analysis

Standard Bolton table

Default

Anterior Bolton Analysis

Maxillary 6 width

46.76 mm.

Mandibular 6 width

38.30 mm.

Ratio

0.82

Use calc. ratio

0.82

Calc. maxillary 6 width

46.71 mm.

Calc. mandibular 6 width

38.34 mm.

Ideal ratios:

Maxill. 6	Mandib. 6	Ratio
40.00	30.90	0.77
40.50	31.30	0.77
41.00	31.70	0.77
41.50	32.00	0.77
42.00	32.40	0.77
42.50	32.80	0.77

Amendment maxillary 6 width

-0.05 mm.

Amendment mandibular 6 width

0.04 mm.

Overall Bolton Analysis

Maxillary 12 width

85.25 mm.

Mandibular 12 width

78.66 mm.

Ratio

0.92

Use calc. ratio

0.92

Calc. maxillary 12 width

85.50 mm.

Calc. mandibular 12 width

78.43 mm.

Ideal ratios:

Maxill. 12	Mandib. 12	Ratio
85.00	77.60	0.91
86.00	78.50	0.91
87.00	79.40	0.91
88.00	80.30	0.91
89.00	81.30	0.91
90.00	82.10	0.91

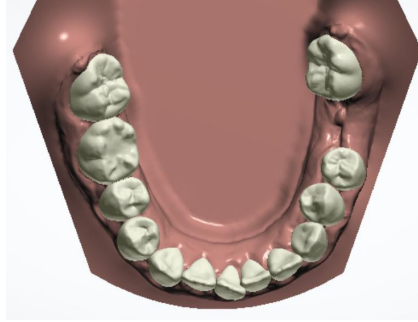
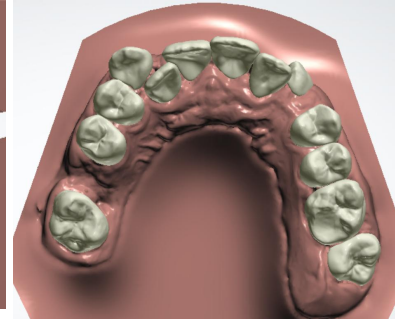
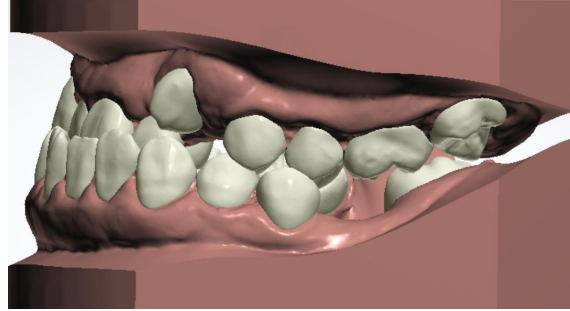
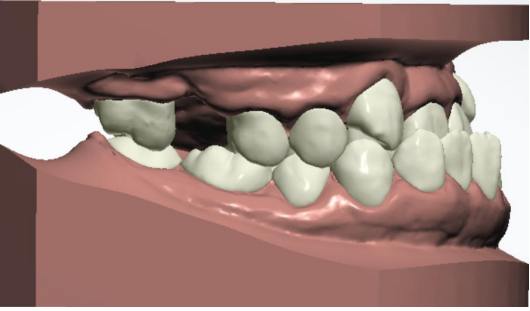
Amendment maxillary 12 width

0.25 mm.

Amendment mandibular 12 width

-0.23 mm.

Diagnosis



Tooth movement data sheet (upper/lower jaw)—— The stages are: 70 periods

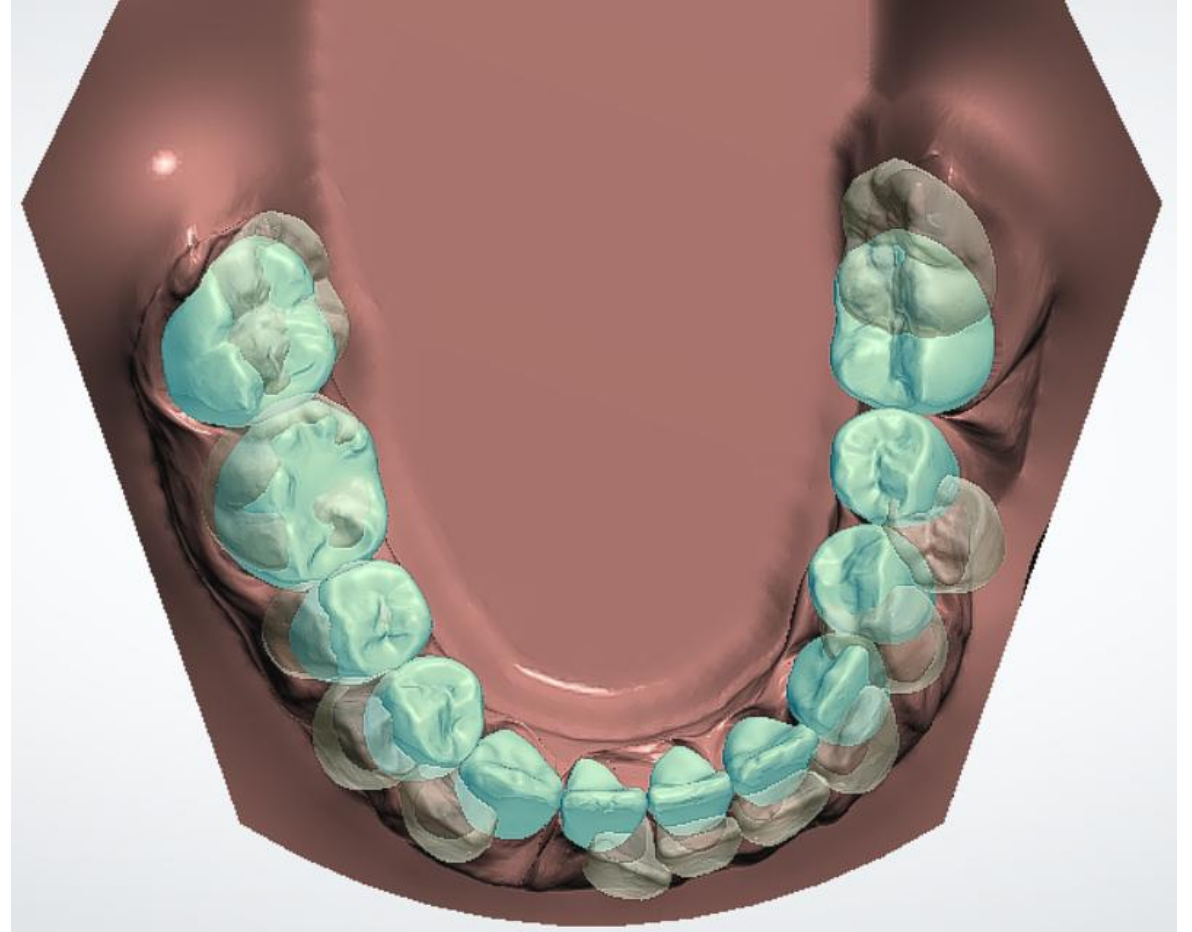
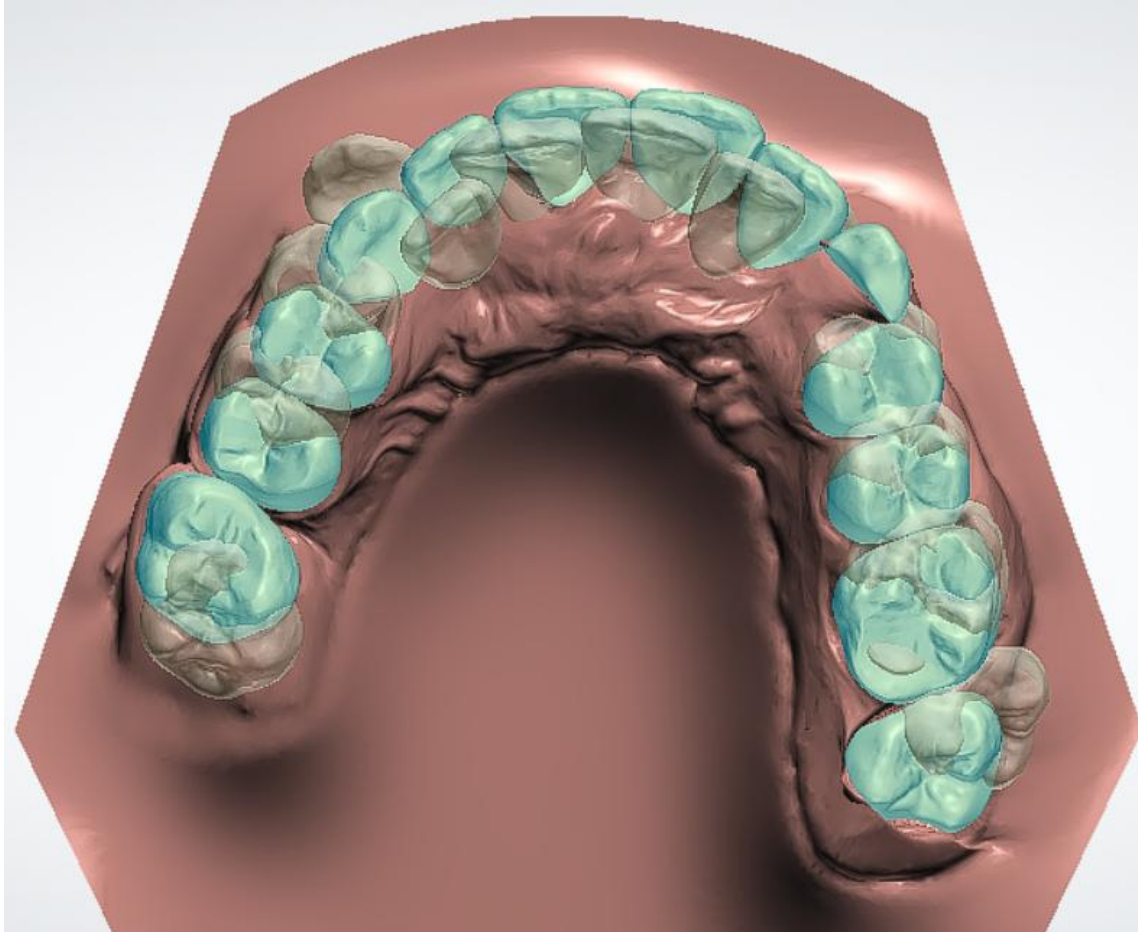
	倾斜	成角	旋转	左/右	前进/后退	挤出/侵入	牙齿长轴角度	IPR 远中	IPR 近中
18	-	-	-	-	-	-	-	-	-
17				3.4 mm	1.5 mm	-0.6 mm	84.6 度		
16	-	-	-	-	-	-	-	-	-
15			7.9 deg	-3.2 mm	-0.9 mm	1.7 mm	74.6 度		
14				-3.8 mm	-1.2 mm	0.8 mm	75.1 度		
13	-10.0 deg		39.2 deg	0.5 mm	-2.8 mm	2.0 mm	57.0 度		
12	8.0 deg	5.0 deg	-8.0 deg	2.4 mm	3.0 mm	-0.1 mm	58.4 度		
11	18.3 deg	7.7 deg	-3.6 deg	2.0 mm	0.0 mm	0.7 mm	59.4 度		
21	10.9 deg		1.7 deg	-2.9 mm	0.6 mm	0.6 mm	49.0 度		
22	1.0 deg	2.9 deg	19.2 deg	-3.1 mm	1.7 mm	-0.7 mm	31.5 度		
23	26.8 deg	-24.7 deg	-18.0 deg	-3.0 mm	2.0 mm	-1.6 mm	70.7 度		
24				-1.8 mm	-0.8 mm	-0.3 mm	67.7 度		
25			3.3 deg	-1.5 mm	-0.7 mm	0.1 mm	67.7 度		
26				-1.6 mm	-0.8 mm	0.2 mm	84.6 度		
27	-17.0 deg			-2.3 mm	-0.9 mm	-0.4 mm	78.2 度		
28	-	-	-	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	-
37	10.4 deg	-9.0 deg	4.4 deg	6.5 mm	-3.0 mm	0.3 mm	66.4 度		
36	-	-	-	-	-	-	-	-	-
35	-9.0 deg			-3.9 mm	-2.0 mm	0.0 mm	74.0 度		
34				-3.3 mm	-1.2 mm	0.4 mm	68.4 度		
33	-8.0 deg		-4.2 deg	-2.5 mm	-0.7 mm	1.4 mm	80.4 度		
32	-8.0 deg			-1.0 mm	-1.1 mm	2.0 mm	79.0 度		
31	-7.0 deg		-5.0 deg	-0.2 mm	-1.4 mm	1.5 mm	86.6 度		
41	-10.0 deg	-4.0 deg	-23.2 deg	-1.9 mm	-0.6 mm	1.9 mm	83.9 度		
42									
43	-14.0 deg	7.0 deg	-22.3 deg	0.0 mm	-0.4 mm	2.2 mm	84.7 度		
44	-6.0 deg		1.5 deg	1.3 mm	-2.0 mm	0.3 mm	71.2 度		
45			-1.7 deg	0.9 mm	-1.4 mm	-1.0 mm	70.9 度		
46			-4.0 deg	1.0 mm	-0.6 mm		72.2 度		
47	11.0 deg		-3.4 deg	1.2 mm	-0.1 mm		68.9 度		
48	-	-	-	-	-	-	-	-	-

Note: Estimated duration 980 days。 about 2.7years

Comparison before and after correction

Shadow - before correction

Blue - after correction



Corrective design animation



01-2020-32

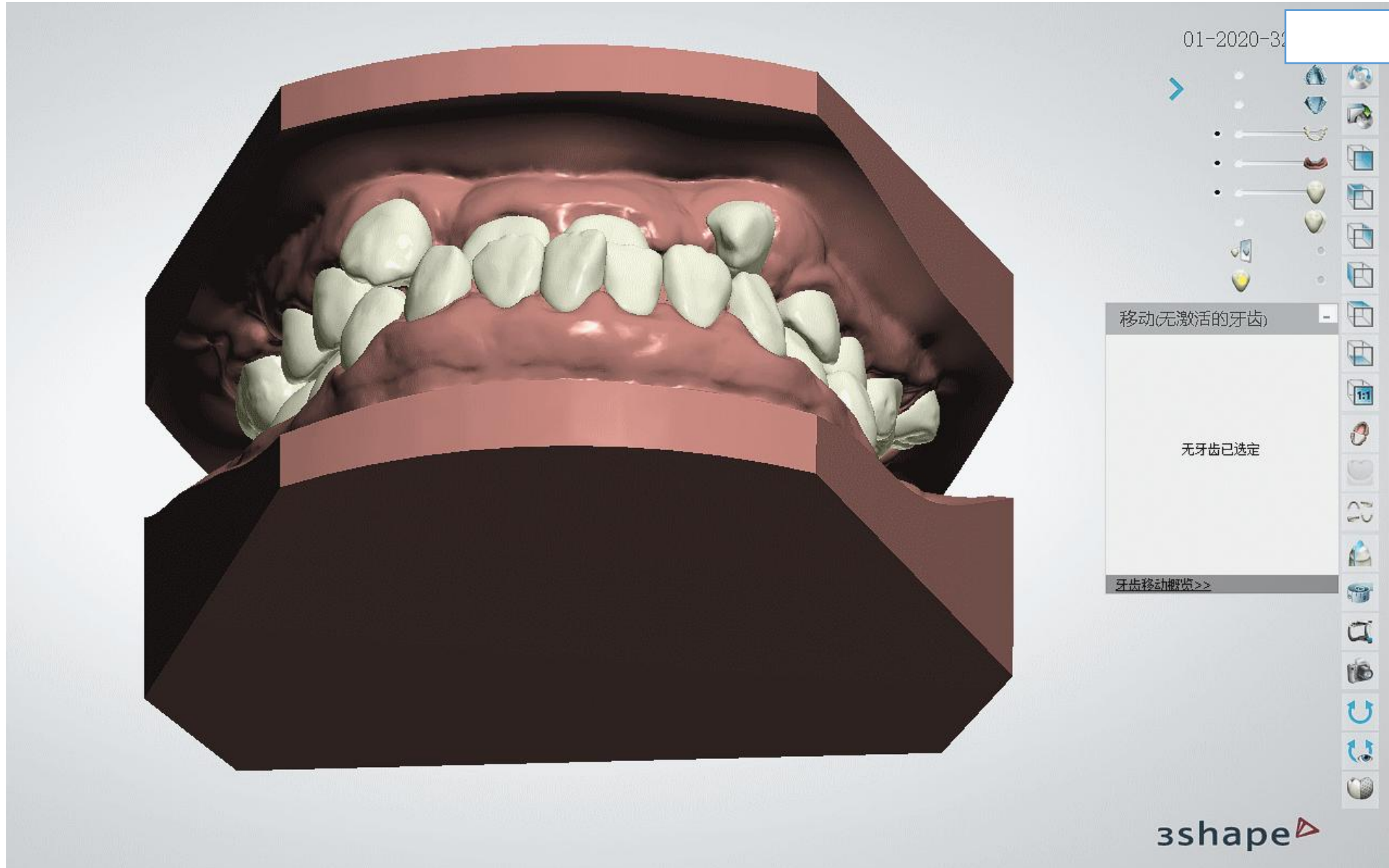
移动(无激活的牙齿)

无牙齿已选定

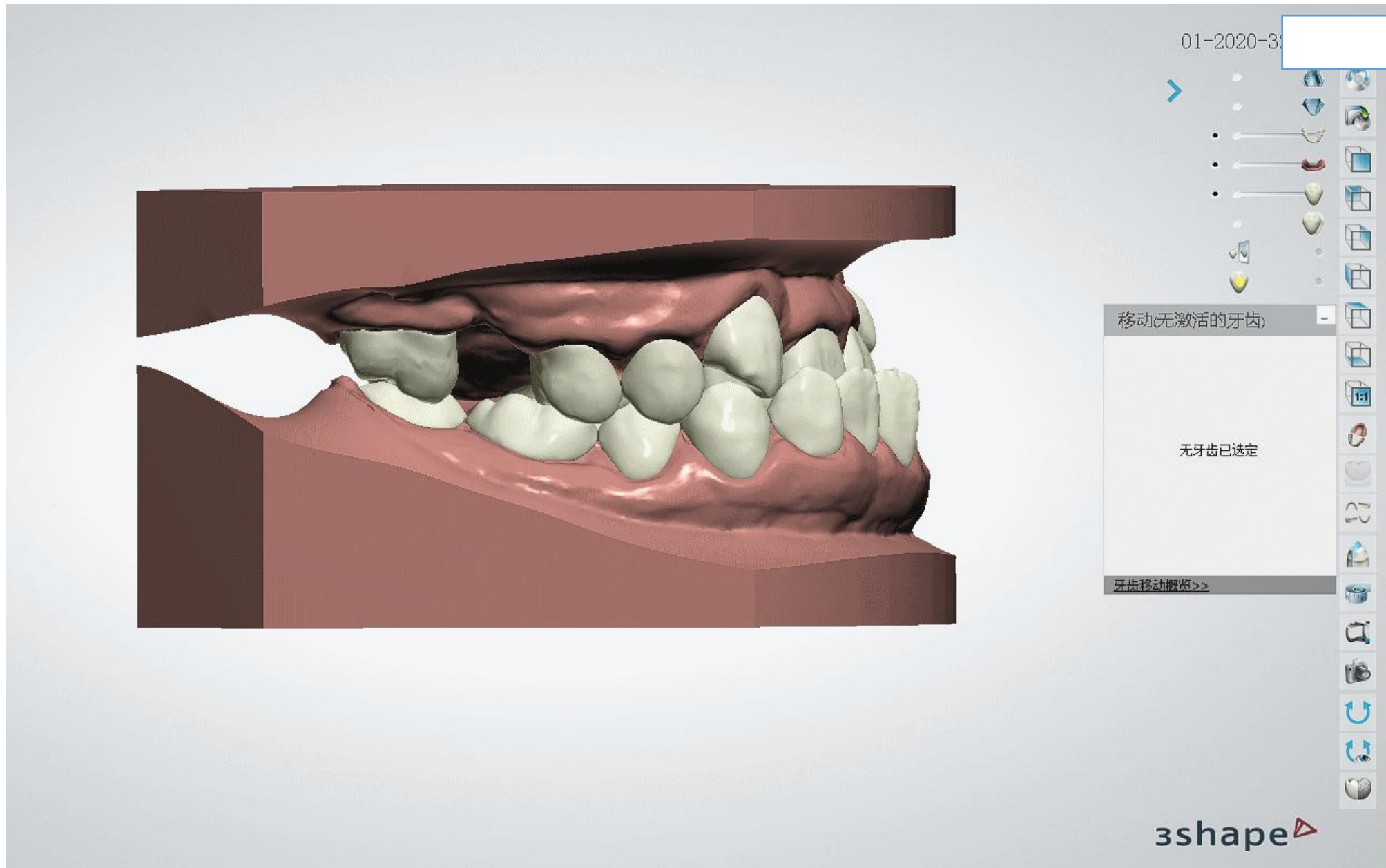
牙齿移动概览>>

3shape

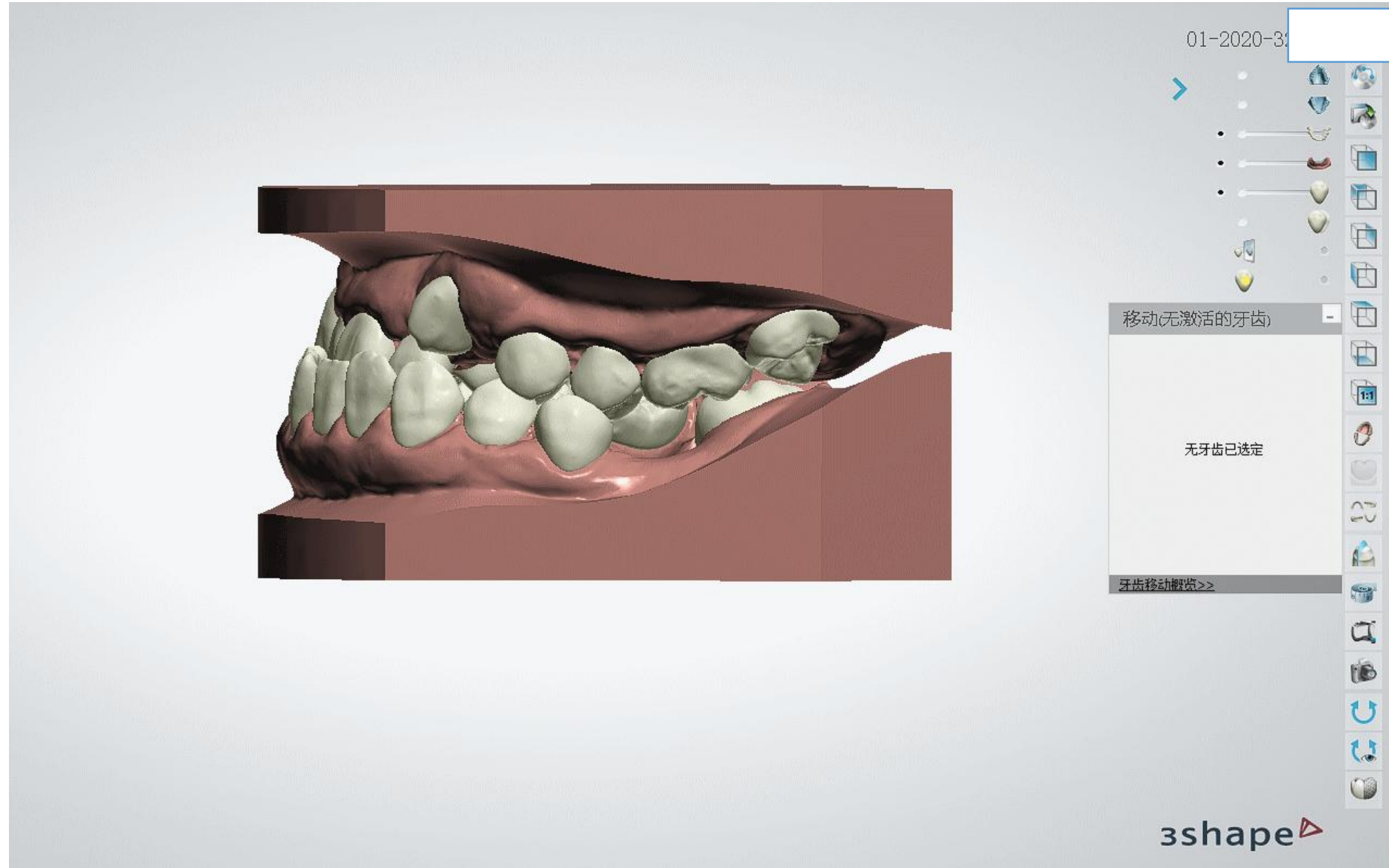
Corrective design animation



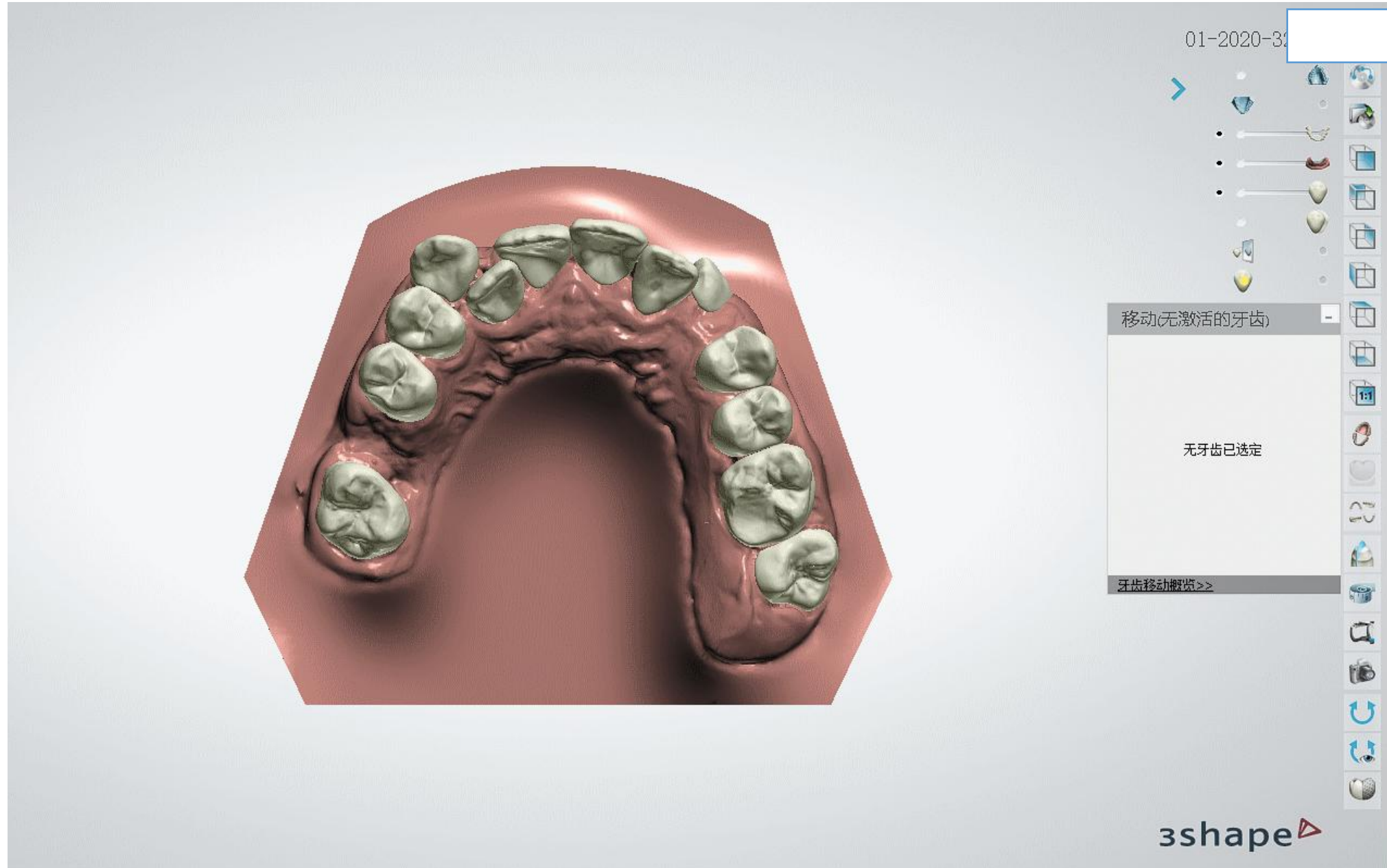
Corrective design animation



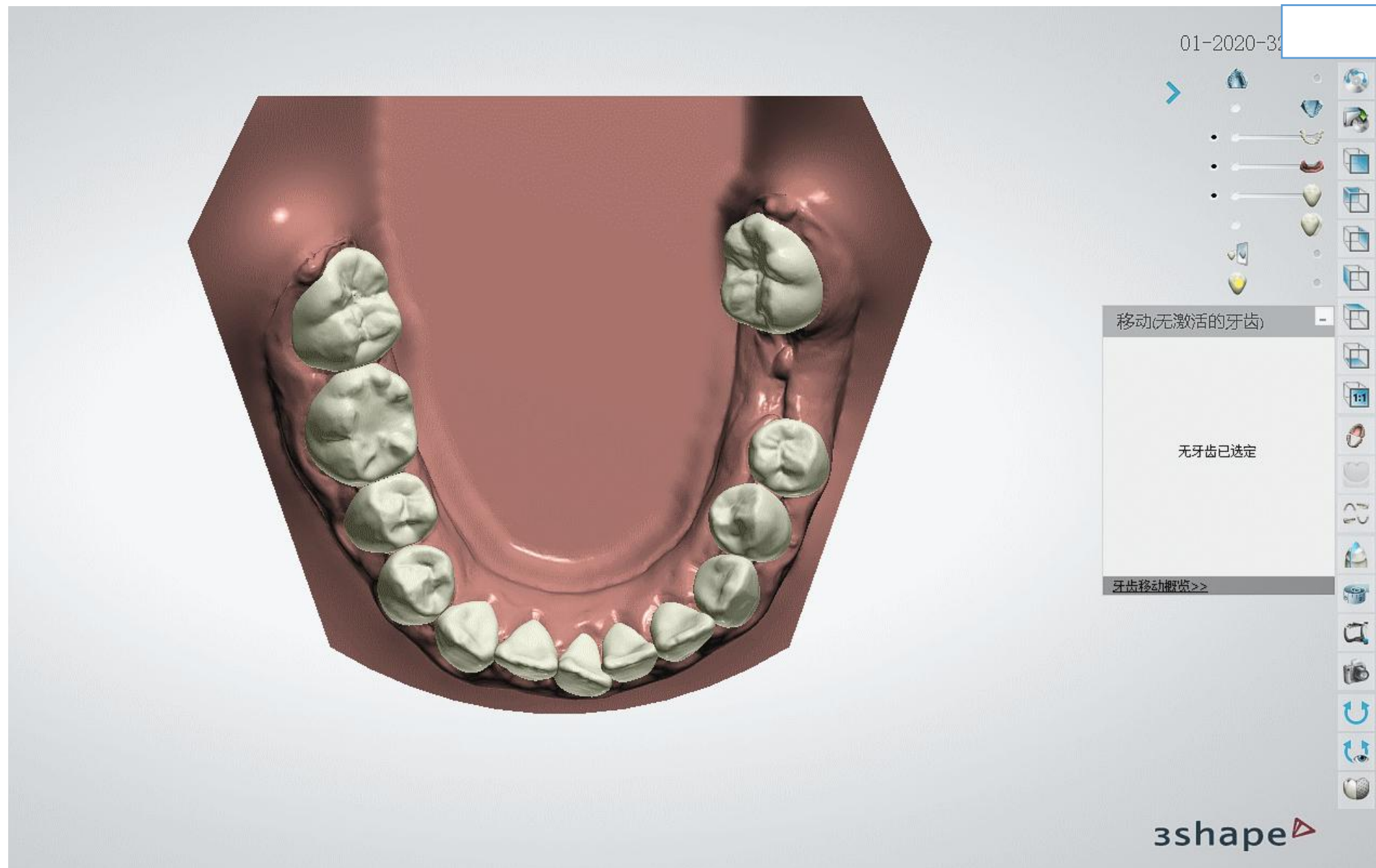
Corrective design animation



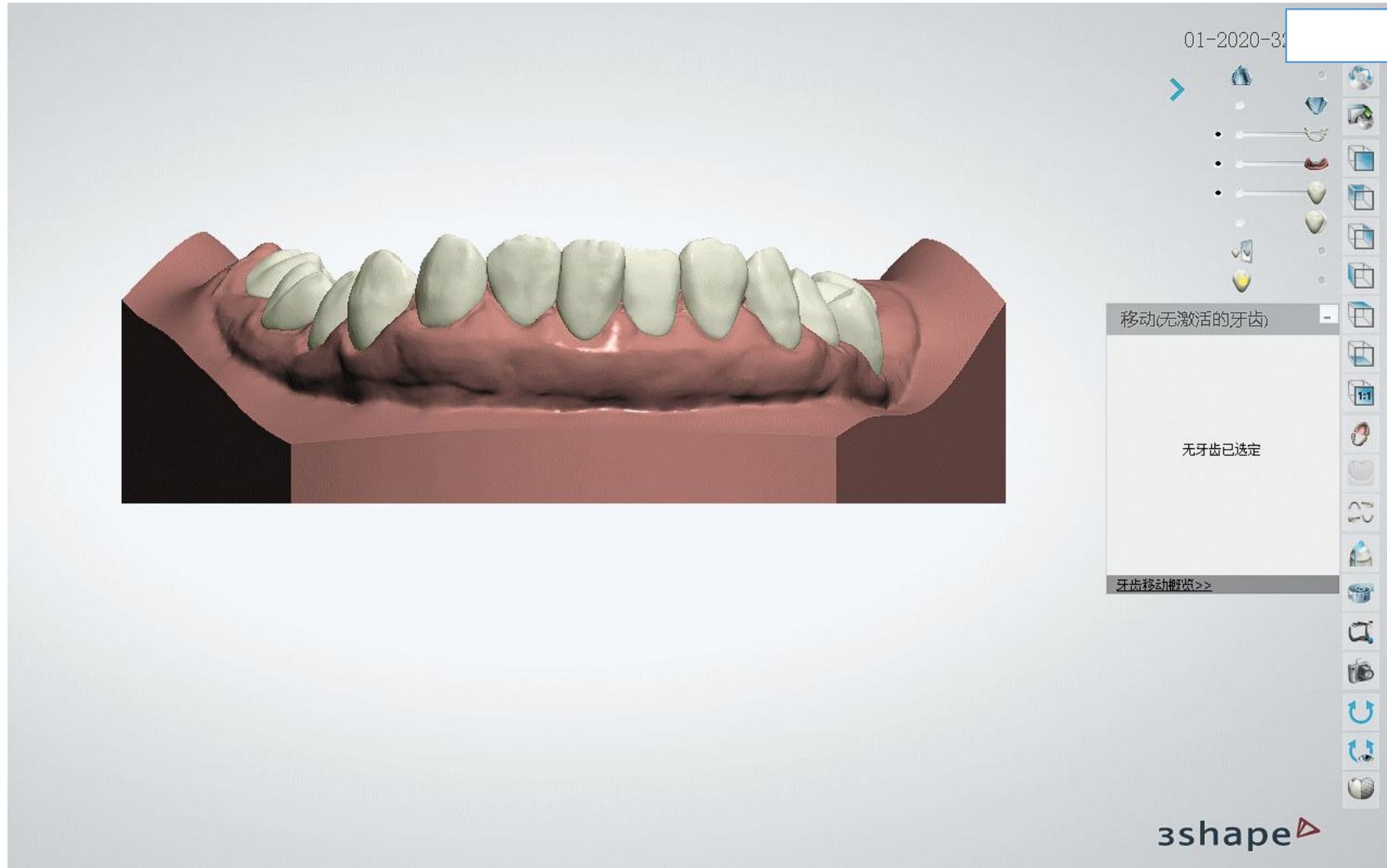
Corrective design animation



Corrective design animation



Corrective design animation





Invisible correction.
Create a beautiful
smile

Begin: 2020.10.20

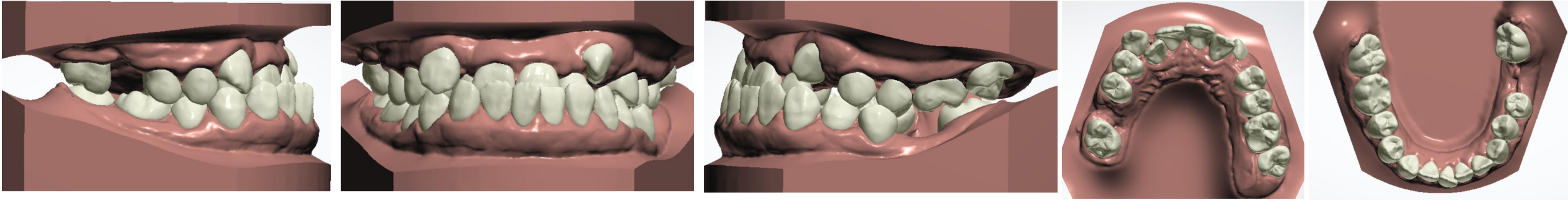
2021-12-18 recent visit, wear 14 months

Comparison before and after correction



Comparison before and after correction

Begin: 2020.10.20



2021-12-18 subsequent visit, wear 14 months



2022-10-04 subsequent visit

