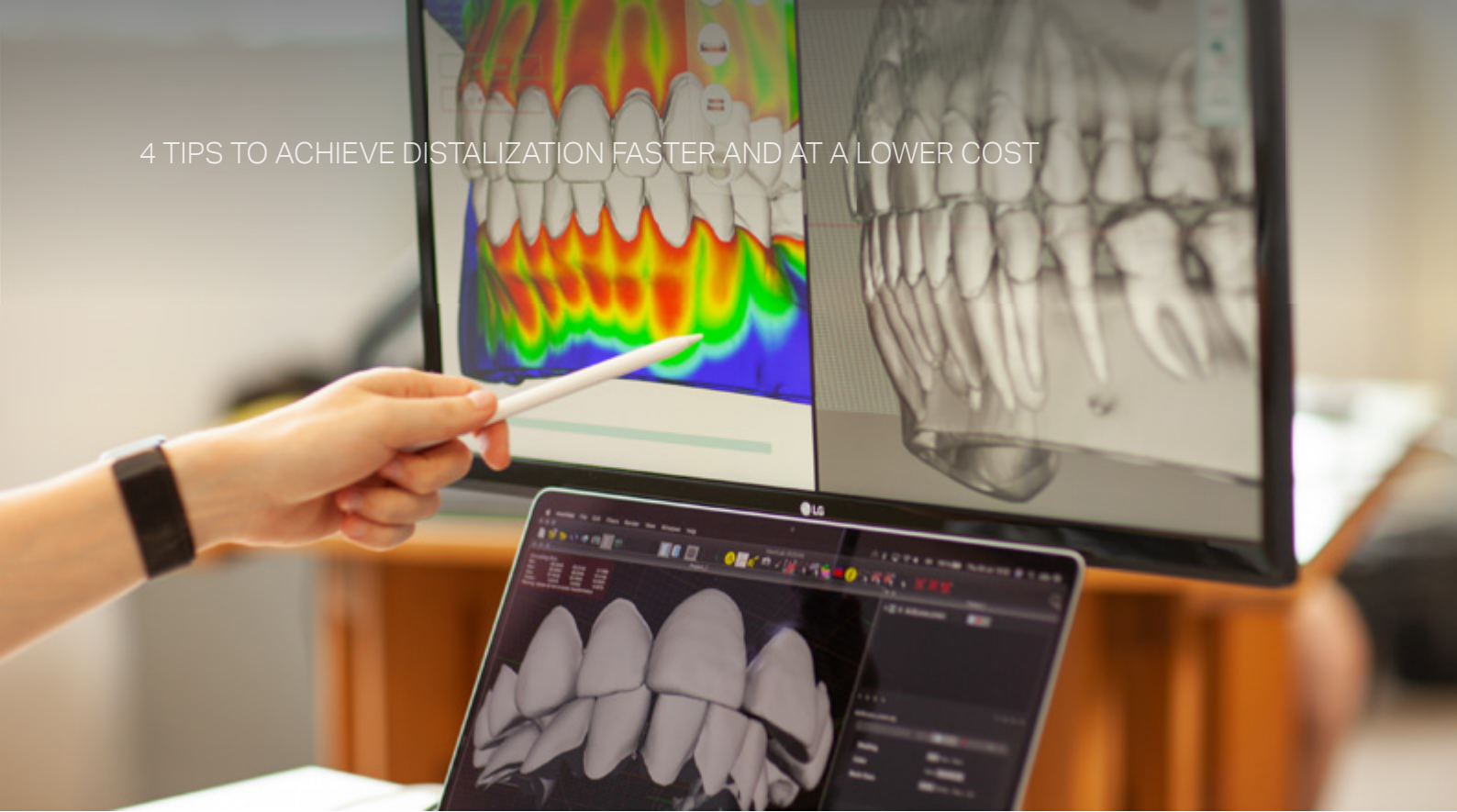


GUIDE

Distalization

4 Tips to achieve
Distalization faster
and at a lower cost



WHY DISTALIZATION?

Based on the Orthodontists Opinion poll (in-depth expert interviews) held by 3D Predict® prior to launch on the US market, distalization, being one of the most important and complex orthodontic tooth movements, is most frequently performed with the use of additional appliances and is often challenging to achieve.

The guide below aims to bring to your attention several tactics which, based on AI-driven analysis of multiple distalization cases, can significantly increase the success and predictability of distalization as well as decrease treatment duration (without accelerating the speed of anatomically possible movements; only through diagnostics and planning).

At every stage of treatment for a particular patient there are several milestones to monitor in:

- Diagnostics
- Planning
- Patient Management
- Must-DOs

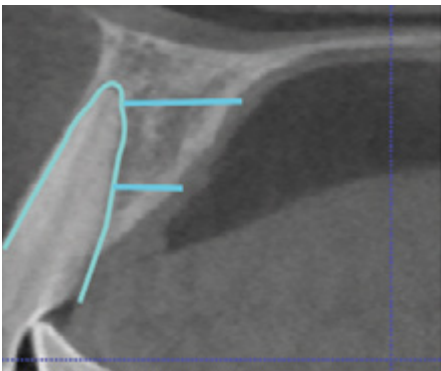
4 TIPS TO ACHIEVE DISTALIZATION FASTER AND AT A LOWER COST

It goes without saying that when planning distalization it is very important to assess the amount of required movement as well as patients' individual anatomy which dictates the amount of possible movement.



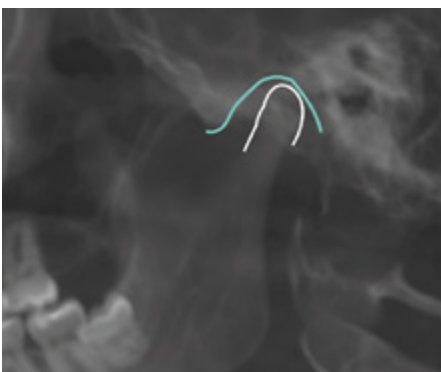
Amount of required distalization

- Presence of 8th teeth.
- Premolar (sometimes also canine) root position relative to sinus.



Amount of required retraction

- Amount of bone for retraction.
- Possibility of incisor palatal root torque.

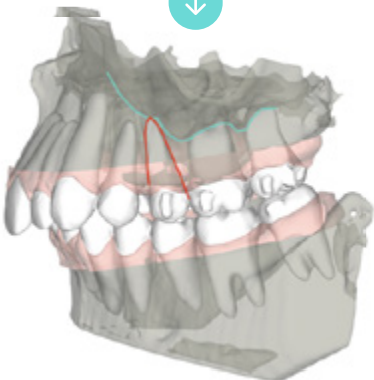
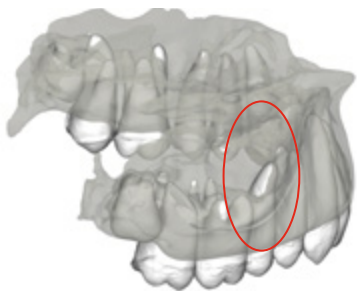


Planned mandible displacement

- TMJ Position.

HOW TO AVOID MISTAKES WHEN PLANNING DISTALIZATION

All illustrations below are made using Deep CBCT® Analysis, a patented diagnostic and planning tool which helps orthodontists make decisions faster and easier thus saving time for more patients and reducing dental office costs.



Sinus

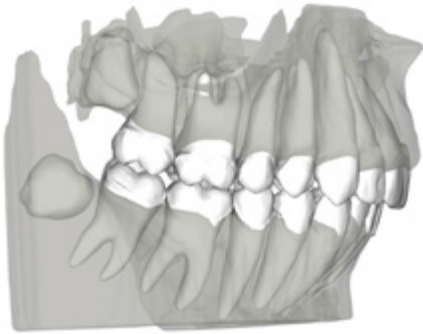
UL5 and UR5 roots are in the sinus

- Estimate space between 2nd premolar and sinus = amount of predictable bodily movement.
- Plan 2nd premolar distal crown tipping and premolar IPR for Class I canine relationship.
- Reduce the amount of distalization for 1st and 2nd molars.
- If needed, plan antagonist teeth mesialization to achieve Class I molar relationship.

Retraction

Large amount of retraction

- Plan extra incisor vestibular root torque.
- Reduce amount of retraction and increase amount of retrusion.
- Adapt the angle between upper and lower incisors to fit the anatomy of a particular patient.



Planned mandible displacement

- Keep Class II relationship for canines and molars;
 - Keep overjet;
 - Plan upper and lower incisors intrusion with overcorrection;
 - Plan extra extrusion for lower premolars (0.5 mm) to compensate for their intrusion.*
- * If incisor intrusion is more than 2 mm — plan premolar extrusion up to 1mm simultaneously with intrusion.



Patient management

- Monitor distalization.
- Control IPR.
- If needed — at the stage of intrusion add incisor IPR to prevent their rotation.



Must-DOs for Distalization:

- Always expand (right combination of tipping and bodily expansion).
- Use bite ramps in case of Deep bite.
- Use torque controls.
- Overcorrection for incisor intrusion.
- Plan canine distal root angulation with overcorrection.
- Always leave overjet (1-2 mm).

Use the Case Selection Table below to choose your correct case with 3D Predict AI-Driven Aligners

Clinical condition	Predict Super Short case (≤8 steps)	Predict Short (≤14 steps)	Deep CBCT / Predict Full (15+ steps)
Class	Class I	Class I (no change or occlusion class)	Class I, II or III
Crowding	< 1mm per arch	< 2mm per arch	2-10mm per arch
Spaces	< 1mm per arch	< 2mm per arch	≥ 2mm per arch
Midline discrepancy	No	No	Yes
Rotation	Incisors / Canines < 10° Premolars / Molars < 10°	Incisors < 15° Canines < 15° Premolars / Molars < 10°	Incisors 15°–50° Canines 15°–50° Premolars / Molars 10°–30°
Angulation	No	Incisors / Canines < 10° Premolars / Molars < 10°	Incisors / Canines 10°–30° Premolars / Molars > 30°
Torque	Incisors / Canines < 10°	Incisors / Canines < 15° Premolars / Molars < 10°	Incisors / Canines > 30° Premolars / Molars > 30°
Intrusion	Incisors / Canines < 0.5mm	Incisors / Canines < 1mm Premolars / Molars < 0.5mm	Incisors / Canines > 3mm Premolars / Molars > 2mm
Extrusion	No	No	Incisors / Canines > 3.5mm Premolars / Molars > 1mm
Distalization	No	Incisors / Canines < 1mm	Incisors / Canines > 6mm Premolars / Molars: MX > 6mm, MN > 1mm
Mesialization	No	Incisors / Canines < 1mm	Incisors / Canines > 6mm Premolars / Molars > 1mm
Open bite	No	No	Yes
Deep bite	No	No	Yes
Cross bite	No	No	Yes
Movement of teeth type	Movement of 4 to 13 teeth only	Movement of 4 to 13 teeth only	All teeth

If at least one parameter corresponds to the full case, select full case.

Contact us at 3DPredict.com or at education@3dpredict.com for more information or a demo with a Clinical Consultant.

4 TIPS TO ACHIEVE DISTALIZATION FASTER AND AT A LOWER COST

Orthodontists are able to treat COMPLEX cases with greater predictability (less refinements) and chair time using staging offered by 3D Predict. This is important clinically, increases patients' happiness and creates positive referrals. Shorter treatment duration creates efficiencies and increases dental office margin and revenue.

Staging based on patients' REAL root and bone analysis allows you to:

- **Assess**

Cortical plate; root angulation and length at each treatment step.

- **Avoid**

Anatomically impossible movements.

- **Achieve**

Predictable expansion and rotation.
Faster distalization w/o additional appliances.
Tooth movement only within the bone.

To Book a demo with our Clinical Consultant
and see how staging based on Deep CBCT®
Analysis may be of value to your dental office,
please contact us at education@3Dpredict.com

