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# Align Technology 2023 Investor Day

**Shirley Stacy**

VP, Finance, Corporate Communication and IRO

# Welcome and Reminder



Meeting presentation is being  
livestreamed with link on the Investor  
Relations page on [aligntech.com](https://www.aligntech.com)  
You can submit a question via Chat



Presentation soft copies will be posted  
on our website after today's meeting



Meeting recording with Q&A will be posted  
on our website after today's meeting

Some products or services mentioned in this presentation may not be available in all markets.  
Inquiries should be made to local Align representatives of the respective countries for availability.

# Safe Harbor and Forward-Looking Statements

This presentation and each of the presentations related to the 2023 Align Technology, Inc. (“Align”) Investor Day as well as the corresponding commentaries regarding the presentations do, or may, contain forward-looking statements, including statements that address activities, events, and developments that Align believes or anticipates will or may occur in the future. These statements may include estimates, predictions, beliefs and other expectations regarding Align’s business momentum, business strategies and strategic priorities, market developments and trends, competition, anticipated costs and expenditures, the development of new products and the timing for certifications and launches of new products or product enhancements, future opportunities for growth and expansion, marketing initiatives, new product and service offerings, as well as statements regarding Align’s anticipated GAAP and non-GAAP financial performance, results of operations and outlooks for 2023, 2024 and beyond. Any such forward-looking statements and predictions contained in this presentation and any corresponding commentary are based upon Align’s experience and perception of conditions, trends, anticipated future developments and other factors it believes under the circumstances and information available to Align as of the date hereof. Readers are cautioned that these forward-looking statements reflect Align’s best judgment based on these currently known facts and circumstances and are subject to risks, uncertainties and assumptions that are difficult to predict. As a result, actual results may differ materially and adversely from those expressed in any forward-looking statement. Factors that may cause such a difference include, but are not limited to, those discussed in more detail in Align’s Annual Report on Form 10-K for the year ended December 31, 2022, which was filed with the Securities and Exchange Commission (“SEC”) on February 27, 2023, and our latest Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, which was filed with the SEC on August 4, 2023. Align undertakes no obligation to revise or update publicly any forward-looking statements for any reason.

The presentations, including any financial reconciliations, have been made available on our website at [investor.aligntech.com](https://investor.aligntech.com)

# About Non-GAAP Financial Measures

To supplement our condensed consolidated financial statements, which are prepared and presented in accordance with generally accepted accounting principles in the United States ("GAAP"), we may provide investors with certain non-GAAP financial measures which may include gross profit, gross margin, operating expenses, income from operations, operating margin, interest income and other income (expense), net, net income before provision for (benefit from) income taxes, provision for (benefit from) income taxes, effective tax rate, net income and/or diluted net income per share, which exclude certain items that may not be indicative of our fundamental operating performance including discrete cash and non-cash charges or gains that are included in the most directly comparable GAAP measure. Unless otherwise indicated, when we refer to non-GAAP financial measures they will exclude the effects of stock-based compensation, amortization of certain acquired intangibles, non-cash deferred tax assets and associated amortization related to the intra-entity transfer of non-inventory assets, acquisition-related costs, and arbitration award gain, and, if applicable, any associated tax impacts.

We use non-GAAP financial measures for financial and operational decision-making and as a means to evaluate period-to-period comparisons. Our management believes that the use of certain non-GAAP financial measures provide meaningful supplemental information regarding our recurring core operating performance. We believe that both management and investors benefit from referring to these non-GAAP financial measures in assessing our performance and when planning, forecasting, and analyzing future periods. These non-GAAP financial measures also facilitate management's internal evaluation of period-to-period comparisons. We believe these non-GAAP financial measures are useful to investors both because (1) they allow for greater transparency with respect to key metrics used by management in its financial and operational decision-making and (2) they will be provided to and used by our institutional investors and the analyst community to help them analyze the performance of our business.

There are limitations to using non-GAAP financial measures, though, because they are not prepared in accordance with GAAP and may be different from non-GAAP financial measures used by other companies. The non-GAAP financial measures are limited in value because they exclude certain items that may have a material impact upon our reported financial results. In addition, they are subject to inherent limitations as they reflect the exercise of judgments by management about which charges are excluded from the non-GAAP financial measures. We compensate for these limitations by analyzing current and future results on a GAAP as well as a non-GAAP basis and also by providing GAAP measures in our public disclosures. The presentation of non-GAAP financial information is meant to be considered in addition to, not as a substitute for or in isolation from, the directly comparable financial measures prepared in accordance with GAAP. We urge investors to review the reconciliation of our GAAP financial measures to the comparable Non-GAAP financial measures included in this presentation or otherwise publicly available and not to rely on any single financial measure to evaluate our business. For more information on these non-GAAP financial measures, please see the table captioned "Unaudited GAAP to Non-GAAP Reconciliation" and other historical reconciliations which are available in the presentations and/or at [aligntechnology.com](http://aligntechnology.com).

# AGENDA

- 1:00pm **Joe Hogan**  
Future of Digital Orthodontics & Dentistry
- 1:15pm **Raj Pudipeddi**  
Leading Digital Transformation Differentiated Platform & Brand
- 1:30pm **Sreelakshmi Kolli**  
Software Innovation – AI ML
- 1:45pm **Srini Kaza**  
Next Generation Breakthroughs in Digital Orthodontic Appliances
- 2:00pm **Zelko Relic**  
Comprehensive dentistry: The value of tooth movement in general dentistry
- 2:15pm **Karim Boussebaa**  
Leading Digital Transformation Starts with iTero™
- 2:30PM **BREAK**

- 2:45pm **Dr. Mitra Derakhshan**  
Invisalign Clinical Evidence
- 3:00pm **Simon Beard**  
AEMEA – GTM
- 3:15pm **Raj Pudipeddi**  
APAC – GTM
- 3:30pm **Jennifer Olson-Wilk**  
Leveraging AI for Improved CX
- 3:45pm **Emory Wright**  
Unmatched Global Scale & Efficiency
- 4:00pm **John Morici**  
Sustainable Growth & Profitability
- 4:15pm **Q&A**
- 5:00pm **RECEPTION**

align | \* invisalign | iTero | exocad

# Investor Day '23

Future of digital  
orthodontics  
& dentistry

Next wave of  
innovation powered  
by **AI+ML** to deliver  
personalized care

align | \* invisalign | iTero | exocad

Joe Hogan, President & CEO



Making clear aligner treatment available  
for **EVERYONE**  
through **DOCTORS**

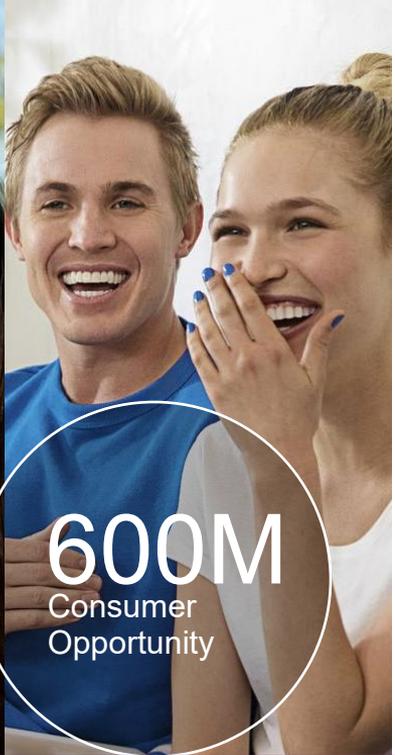
# ENORMOUS OPPORTUNITY



**600M**  
Consumer  
Opportunity

**15M** teens      **22M** Annual ortho starts      **7M** adults

# ENORMOUS OPPORTUNITY

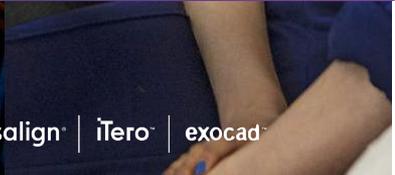


600M  
Consumer  
Opportunity

15M teens

22M  
Annual ortho starts

7M adults





Global Opportunity

22M Ortho starts      600M potential patients

The future is bright!



**600M**  
POTENTIAL PATIENTS

through

**+2M**  
DOCTORS

with an  
iTero™ scanner at  
**EVERY CHAIR**



# +26 YEARS

From appliance to platform

Revenue Y/Y%  
LTM 20% - 30%

2001–2023

+23%

## 1997 – 2006

Invisalign® clear aligners  
ClinCheck® software  
Attachments  
3D Printing SLA

## 2007 – 2012

Force system biomechanics  
G-Series  
Vivera™ retainers  
Teen product  
SmartForce™ features  
ClinCheck® Pro  
iTero™ intraoral scanners

## 2013 – 2016

SmartTrack™ material  
Biteramps  
Invisalign® Outcome Simulator  
SmartStage™ technology  
iTero Element™ scanner  
Mandibular advancement

## 2017 – 2023

Invisalign First™  
My Invisalign™ app  
iTero Element™ 5D imaging system NIRI  
ClinCheck® Pro 6  
exocad™ lab software  
Invisalign® Virtual Care  
Professional Whitening  
Subscription  
E-Commerce  
Diagnostics  
Invisalign® Practice App  
Invisalign Smile Architect™  
Invisalign® Virtual Care AI  
Enhanced precision wings for  
Invisalign treatment with mandibular advancement

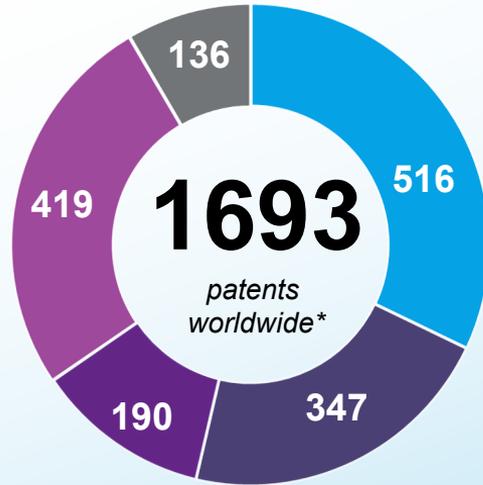
\*CAGR based on mid-point of revenue guidance for the full year 2023, as of July 26th, 2023

● Software ● New products ● Services

# We are Inventors creating the future of Dentistry

## ALIGN GLOBAL ACTIVE PATENTS

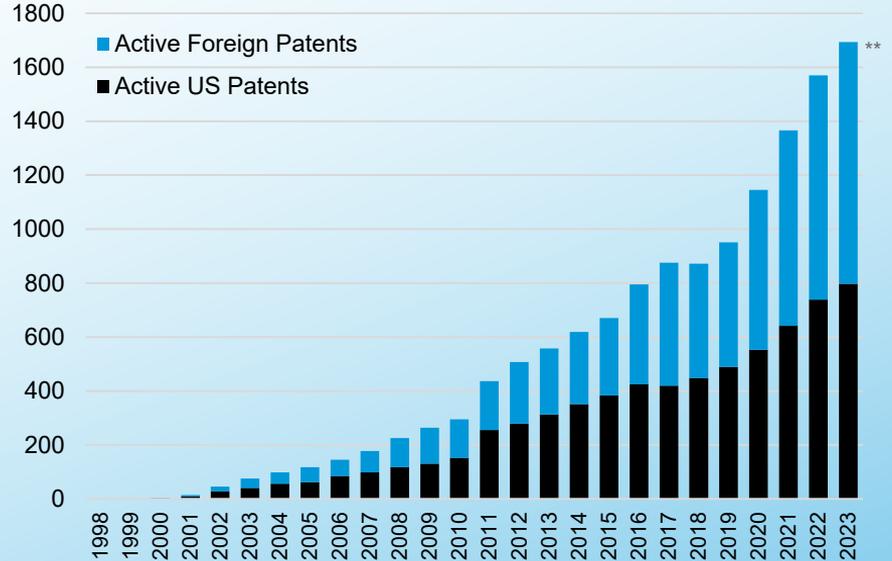
By Technology Categories



- Treatment Software
- Dental Processes
- Manufacturing
- Aligners
- Scanners

\*Patents issued worldwide as of June 30, 2023

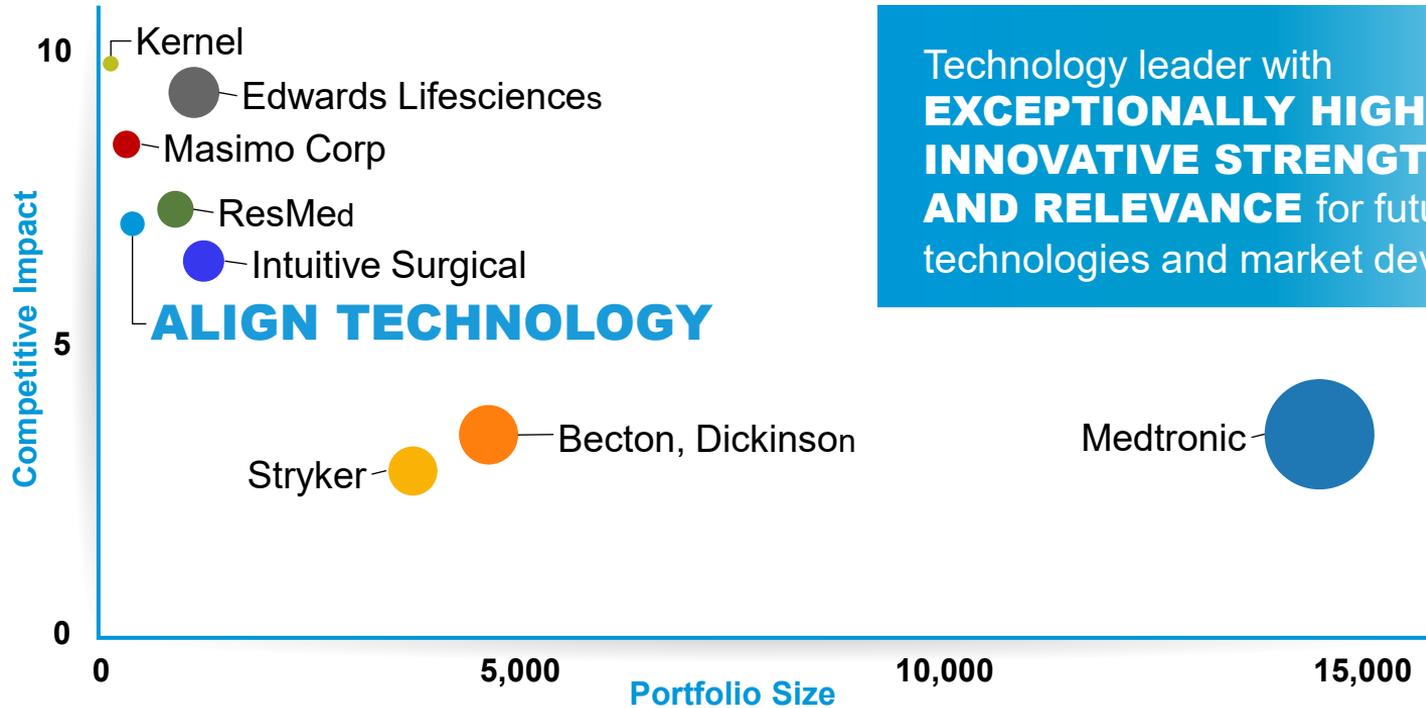
## ALIGN GLOBAL PATENT PORTFOLIO GROWTH



\*\*Global active patents as of June 30, 2023

**DOUBLED** our Patent Portfolio in the last FIVE years

# ALIGN is a **GLOBAL TOP 100 INNOVATOR** *2 years in a row*



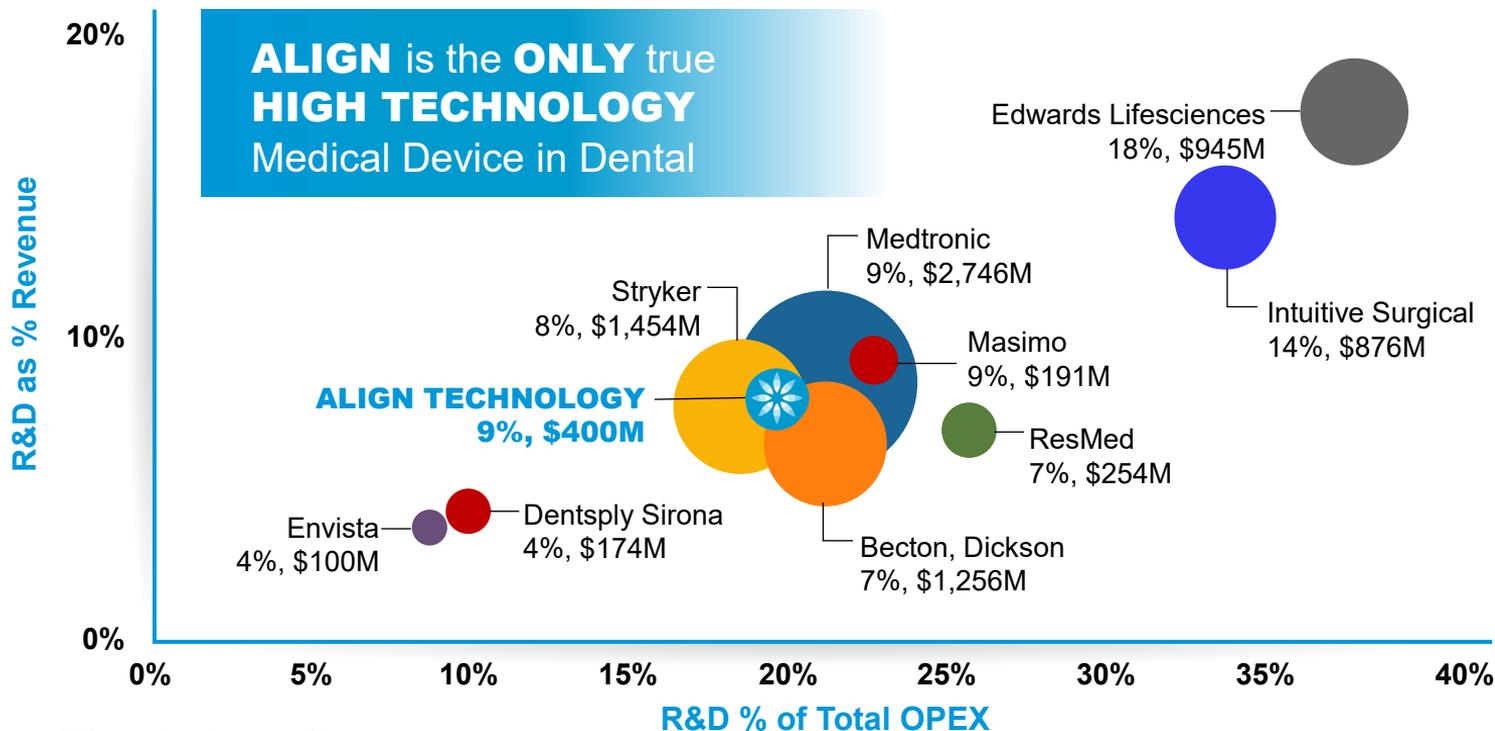
Technology leader with  
**EXCEPTIONALLY HIGH  
INNOVATIVE STRENGTH  
AND RELEVANCE** for future  
technologies and market developments

Citation: LexisNexis "Innovation Momentum 2023: The Global Top 100" report

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# Next gen innovation leaders

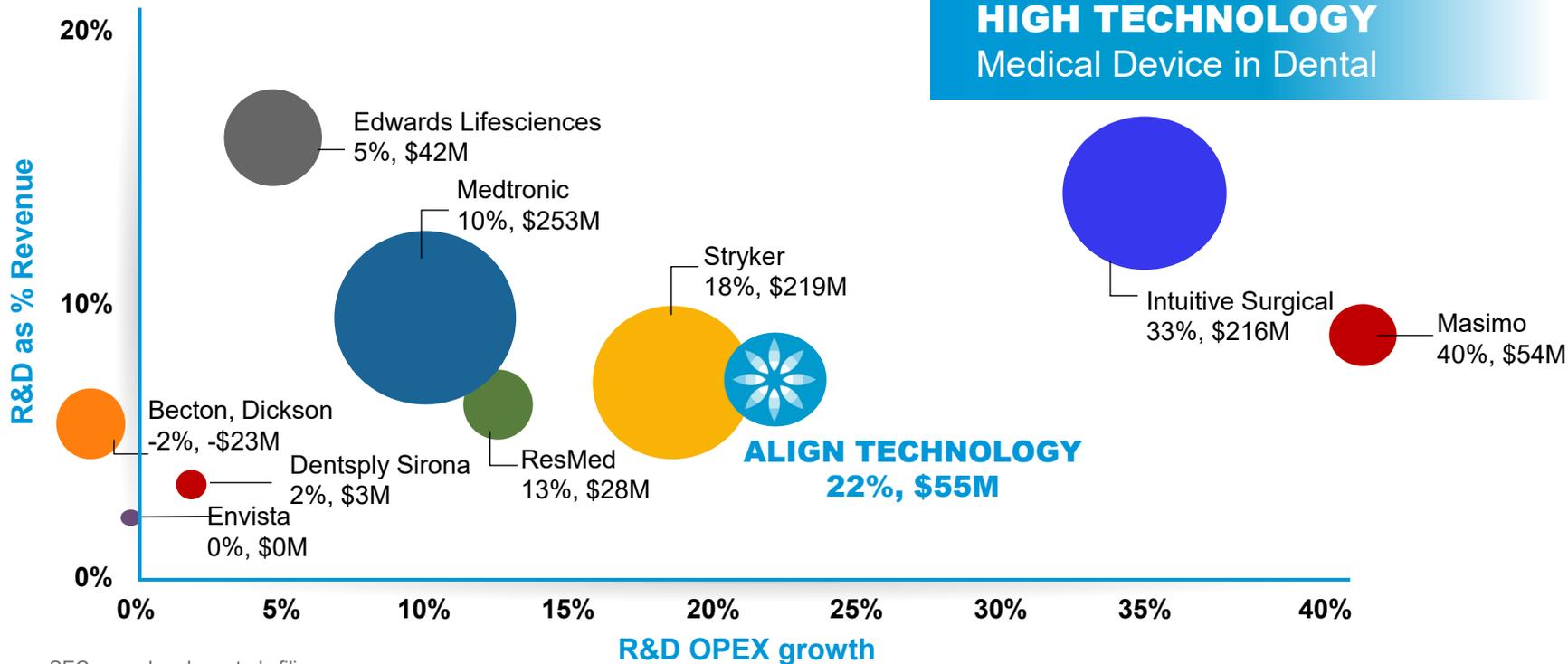
## DRIVE GROWTH THROUGH R&D



Source: SEC annual and quarterly filings

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# MOST TRUSTED and leading brand in orthodontics



Source: SEC annual and quarterly filings

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# align digital platform™

TRANSFORMING SMILES, CHANGING LIVES.



Connect



Scan



Diagnose



Plan



Treat



Monitor



Retain



CONSUMERS  
& PATIENTS



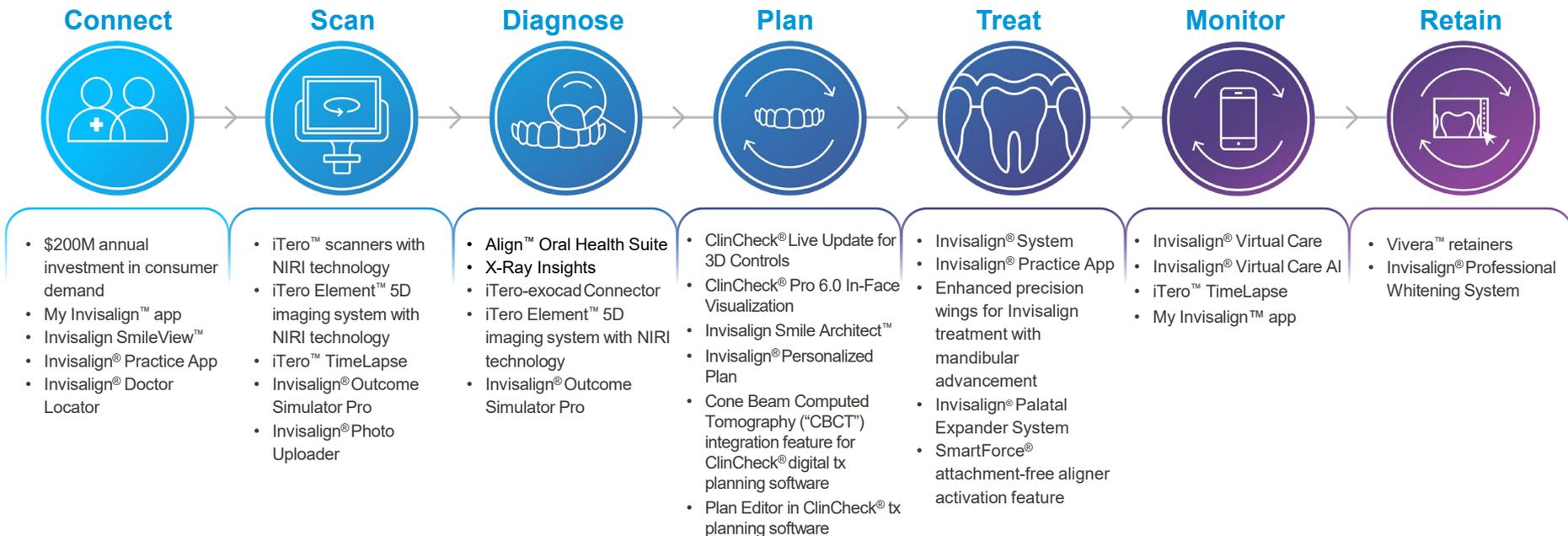
DOCTORS



DENTAL LABS

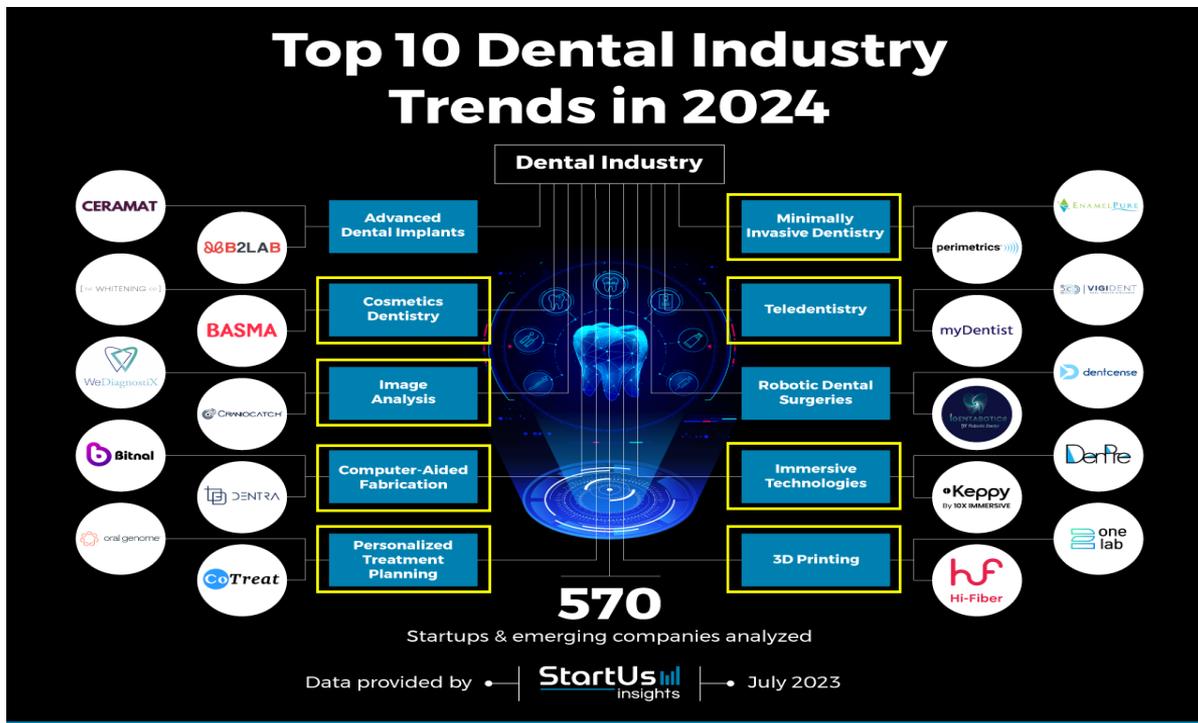
# Align Digital Workflow

Dedicated tools and capabilities for each stage of the treatment journey



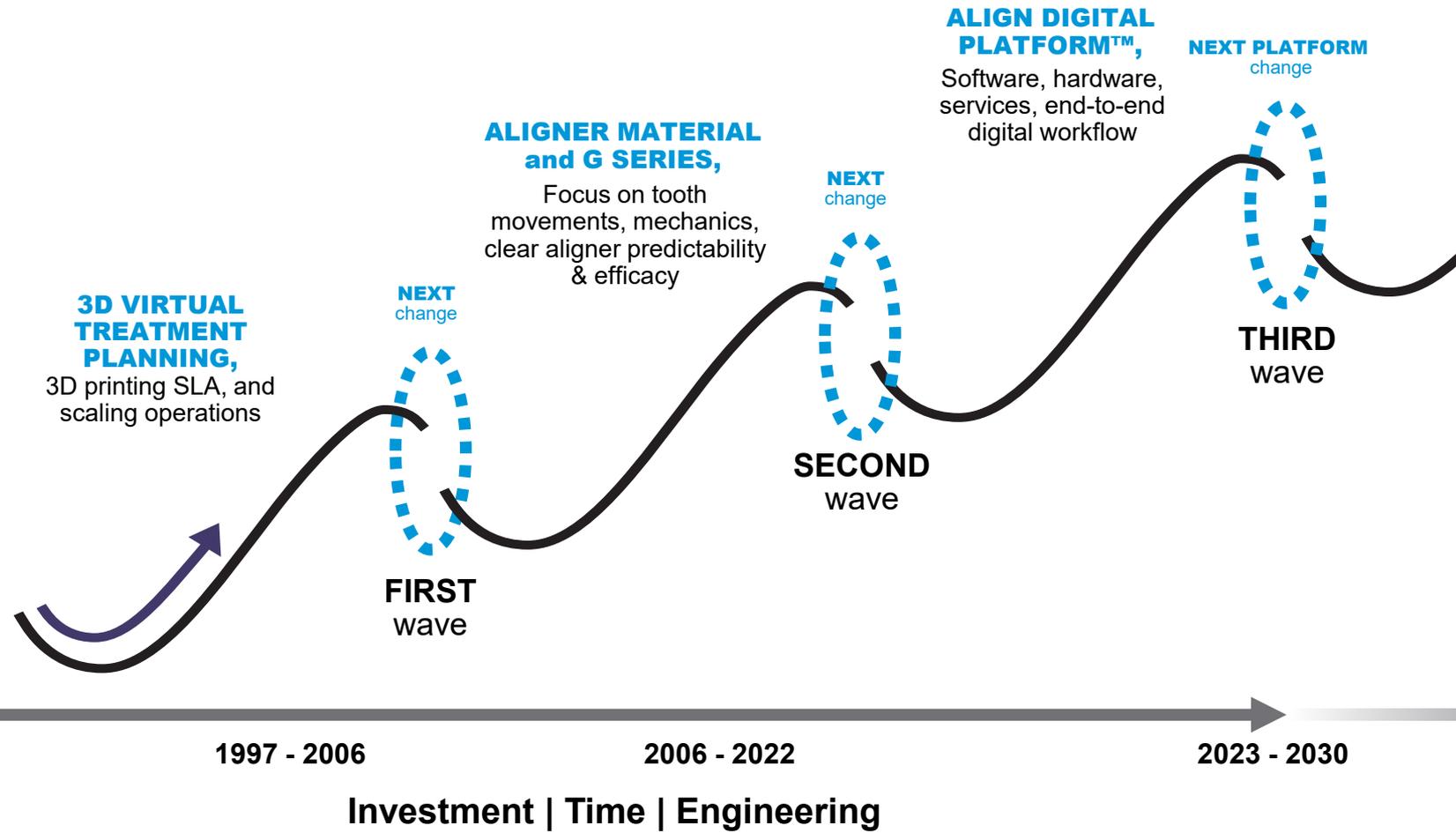
# Top 10 Dental Trends of the Future

## Align executing ahead of the industry



Align innovation roadmap addressing majority of top 10

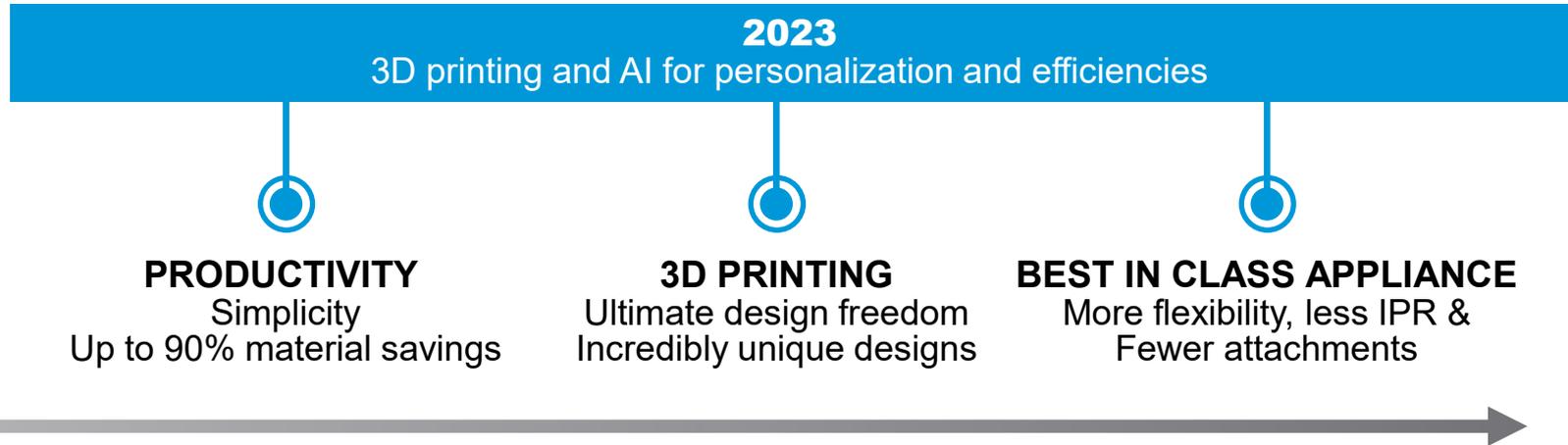
Product Performance | Clinical Efficacy



# DIRECT 3D PRINTING NEXT WAVE OF INNOVATION

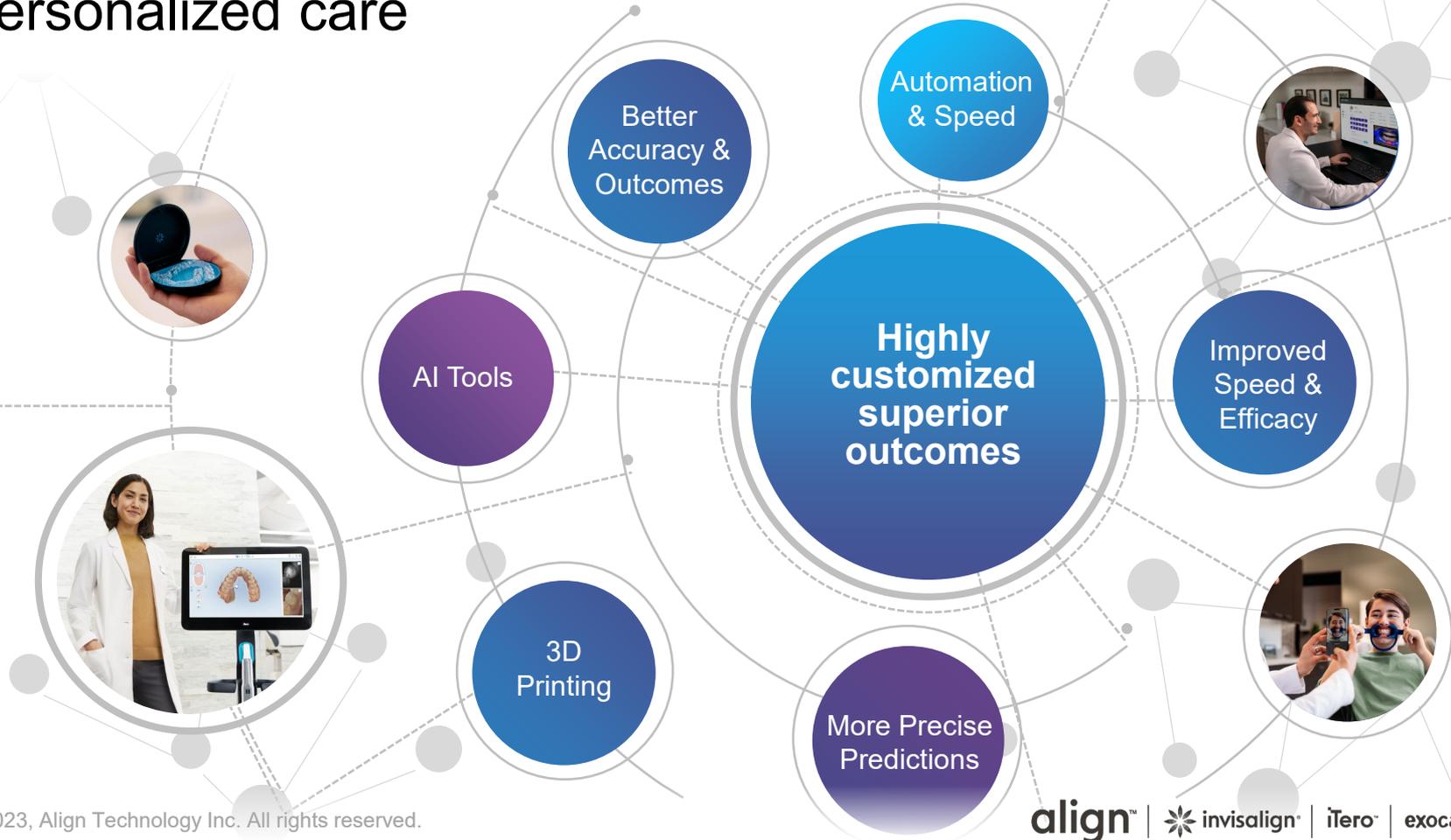
in digital  
orthodontics

## NEXT PLATFORM CHANGE



Technology that enables a new phase of **GROWTH**

# Align innovations powered by **AI/ML** enable more personalized care



**\$400M**

Technology  
Innovation

**5K+**

Sales, Service,  
Clinical Education

**>195** ↑  
countries

Regulatory  
Clearance

**\$ Billion**

Consumer  
BRAND

**SCALE**

Transforming



changing lives

# Leading Digital Transformation Differentiated Platform & Brand

**Raj Pudipeddi**

Chief Product & Marketing Officer,  
EVP & MD, APAC Region

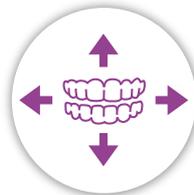
**INTERNATIONAL  
EXPANSION**



**PATIENT  
DEMAND**



**ORTHODONTIST  
UTILIZATION**



**GP DENTIST  
TREATMENT**



Focused Execution  
**STRATEGIC  
GROWTH DRIVERS**



**>22B**  
impressions and  
67.9M Unique Visitors in 2022



Invisalign Smile Squad: Global Reach

**>300M**



MyInvisalign  
app available in

**60+** markets  
with 3.3M downloads to date  
(350K monthly active users\*)



New Consumer Website in aligners  
straighten teeth...

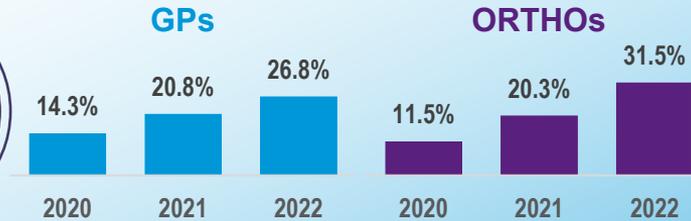
**102** markets

# Driving Adoption and Utilization

## NEW DOCTOR ONBOARDING



% of new doctors doing 3 cases in 90 days



## GROWTH PROGRAMS\*



100K+ Doctors  
(2020-2022)

# of Orthos:  
# of GPs:

+11%  
+10%

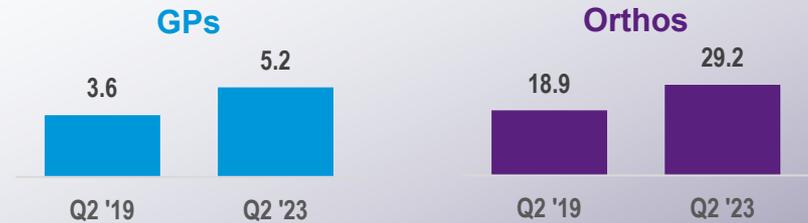
+39%  
+12%

\*Excludes LatAm

Q2 2021 to Q2 2023

## Utilization\*

### North America



### International

#### GP & ORTHO



\*number of cases shipped / number of doctors to whom cases were shipped

# align digital platform™

TRANSFORMING SMILES, CHANGING LIVES.



Connect



Scan



Diagnose



Plan



Treat



Monitor



Retain



CONSUMERS  
& PATIENTS



DOCTORS



DENTAL LABS

# Recent Innovations



## Connect

\$200 Million investment in Marketing

Invisalign® Practice App

My Invisalign™ app redesign



## Scan

Invisalign® Outcome Simulator Pro

iTero™ exocad™ Connector 1.0



## Diagnose

iTero™ NIRI technology



## Plan

Invisalign® Personalized Plan

Live Update for 3D Controls

CBCT integration

Treatment Planning Services

Invisalign Smile Architect™



## Treat

Improved Predictability

Invisalign™ Professional Whitening System

Enhanced Precision Wings for MA

Invisalign® Portfolio additions  
Comp 3in3,  
Essentials, Whitening



## Monitor

Invisalign® Virtual Care AI



## Retain

Vivera™ Retainers  
1-4 sets

as of 08/28/2023

# Upcoming Innovations



## Connect

### My Invisalign™ app

- Doctor Estimate
- Whitening



## Scan

### Align™ Oral Health Suite

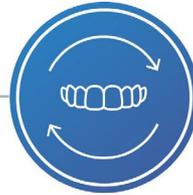
### iTero™ exocad connector 2.0



## Diagnose

### Align™ Oral Health Suite

### X-Ray Insights



## Plan

### Invisalign Smile Architect™ Facial Driven Ortho Restorative plan

### Treatment Planning Services (Payments)

### IPA ClinCheck Mobile

### Plan Editor (with Live Update)



## Treat

### Reduce Attachments

### Pilots

- Palatal expander
- Pre-formed Attachments
- MA Occlusal Blocks



## Monitor

### Invisalign® Virtual Care AI

### Lens/Photo tube



## Retain

### Vivera™ Retainers

- Virtual bracket removal
- DSP expansion & Ship to patient

as of 08/28/2023

# Winning with teens & young adults



Brand foundation



Compelling creative



Brand experience, Sonic identity



Search, Social media, Metaverse



BRAND ASPIRATION



# Real-time Invisalign treatment

## Intelligent plan delivered in minutes

Personalized plan that automatically integrates all records



## Start from anywhere

Available via Cloud on any device  
Simplified prescription form



## Revised plan delivered in minutes

Tools to make real-time changes  
Live Update for 3D Controls  
and new Plan Editor



## Enhanced visualization tools

Tools to enhance visualization  
Cone Beam CT scan  
Articulation and tissue morphing



## Aligners within days



# High Quality Experience & Outcomes

## PREDICTABILITY

clinicians fully confident



- Increase predictability of difficult movements
- Minimal attachments solution
- Simulation and ML based treatment models

## NEW PRODUCTS

Invisalign is even easier



- Invisalign® First Palatal Expander
- 3D Printed Attachments
- UV Case and Ultrasonic Cleaner

## DIRECT FABRICATION

Transforms the industry



- Direct printing of Aligners and retainers
- Next Gen materials and printing process

## EXPAND PORTFOLIO



- Comprehensive 3in3
- Expand DSP
- Expand Essentials
- Expand Whitening

# SEAMLESS end-to-end experience



Transforming



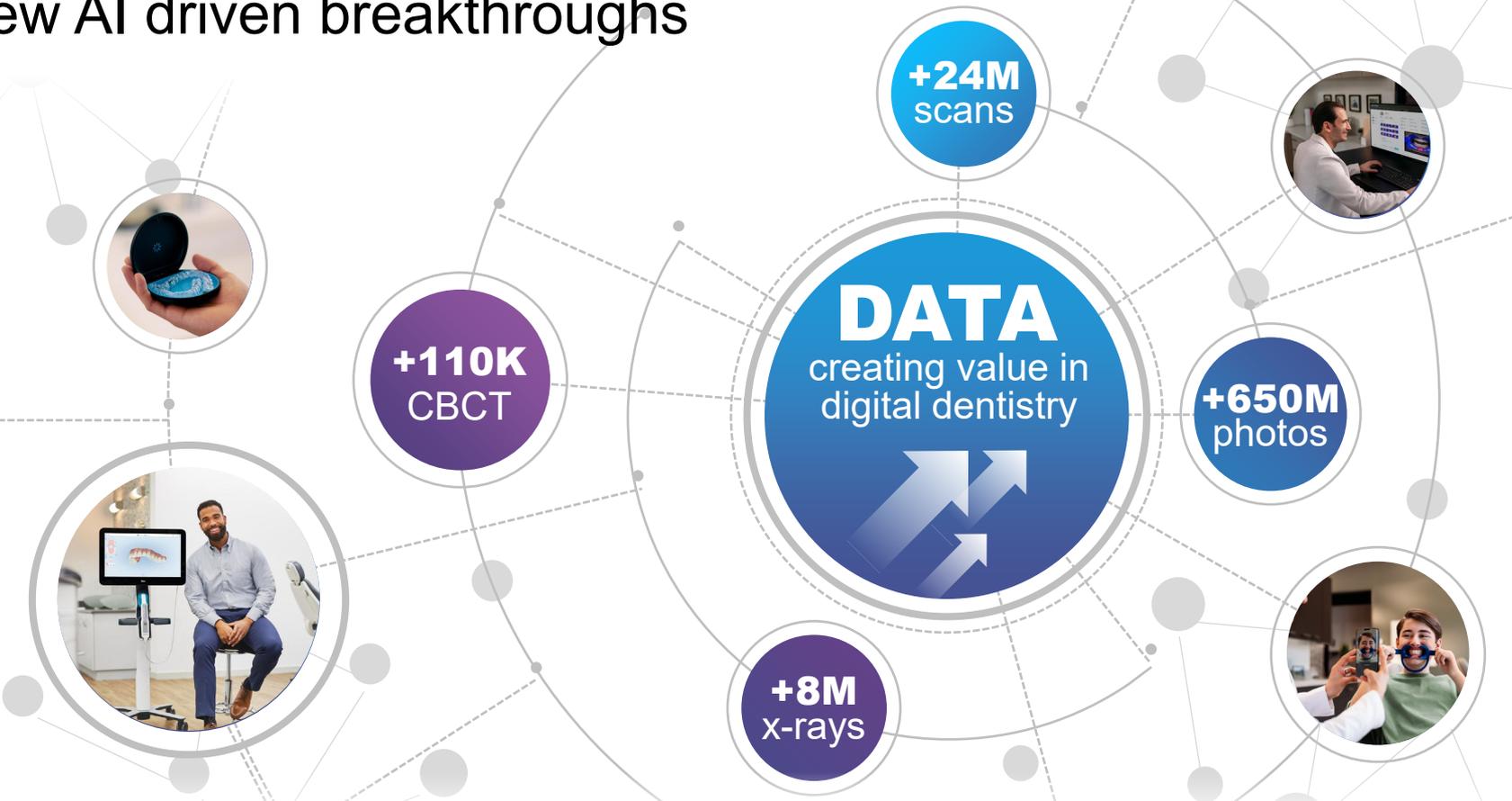
changing lives

# Software Innovation – AI ML

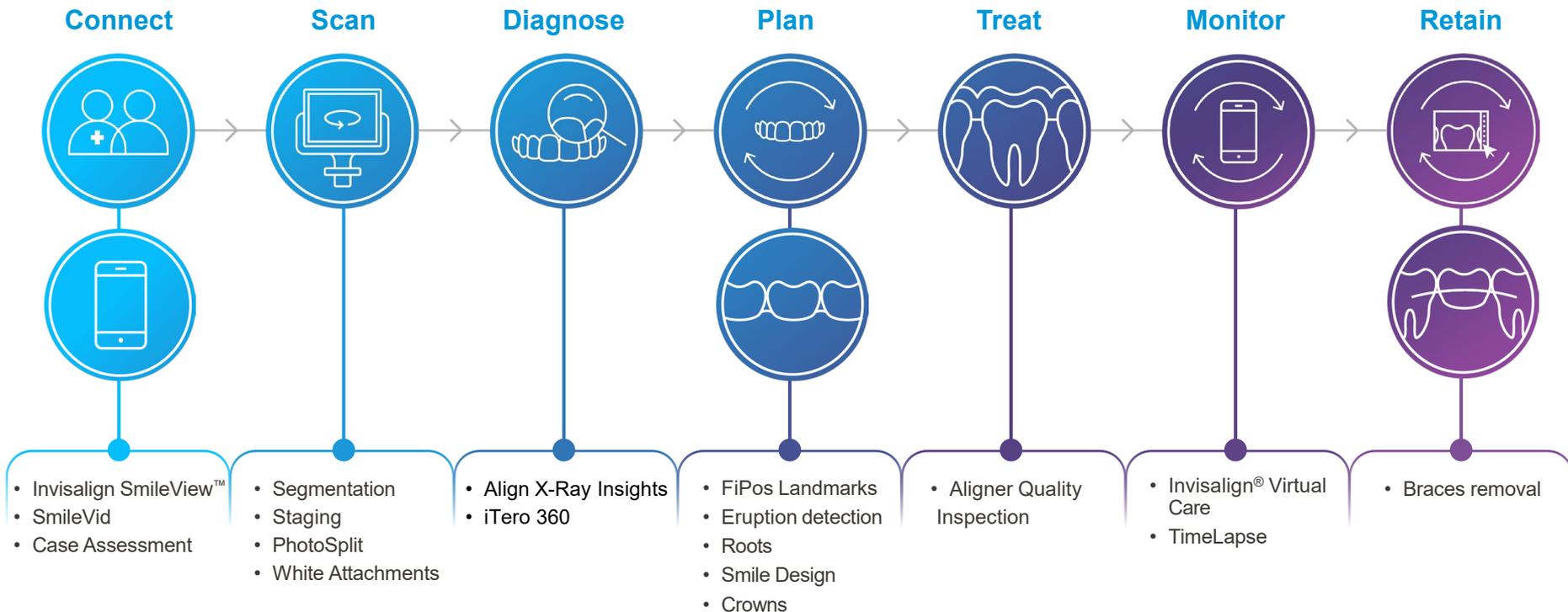
**Sreelakshmi Kolli**

EVP, Chief Digital Officer

# Power of **HIGH QUALITY DATA** enables new AI driven breakthroughs



# AI underpins our product innovations



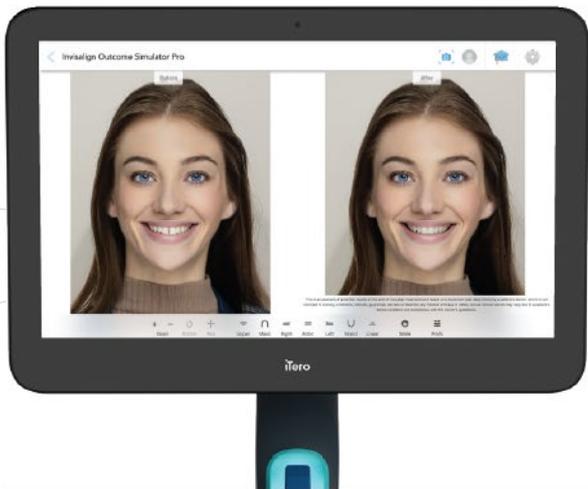
# CHAIRSIDE IN MINUTES

## CONVERSION

# Invisalign® Outcome Simulator Pro

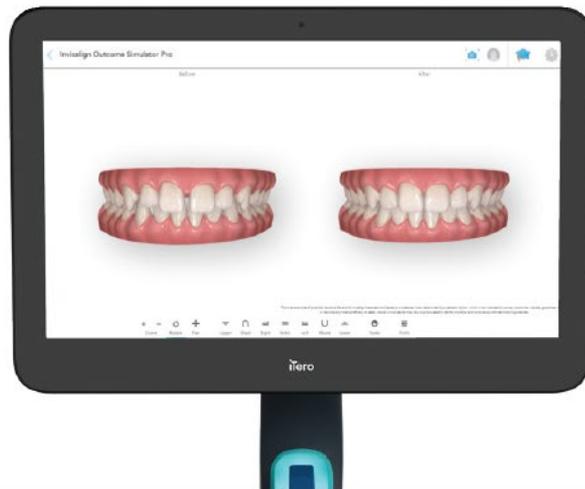
### In-face visualization view

Creates initial “wow” moment with patients  
Designed to increase Invisalign case acceptance



### 3D model view

Provides detailed view for in-depth patient discussion  
Access simulations at any time from the cloud



Some products or services may not be available in your markets. Please check with local Align representatives of the respective countries for availability.

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## DIAGNOSIS

# X-Ray Insights\*



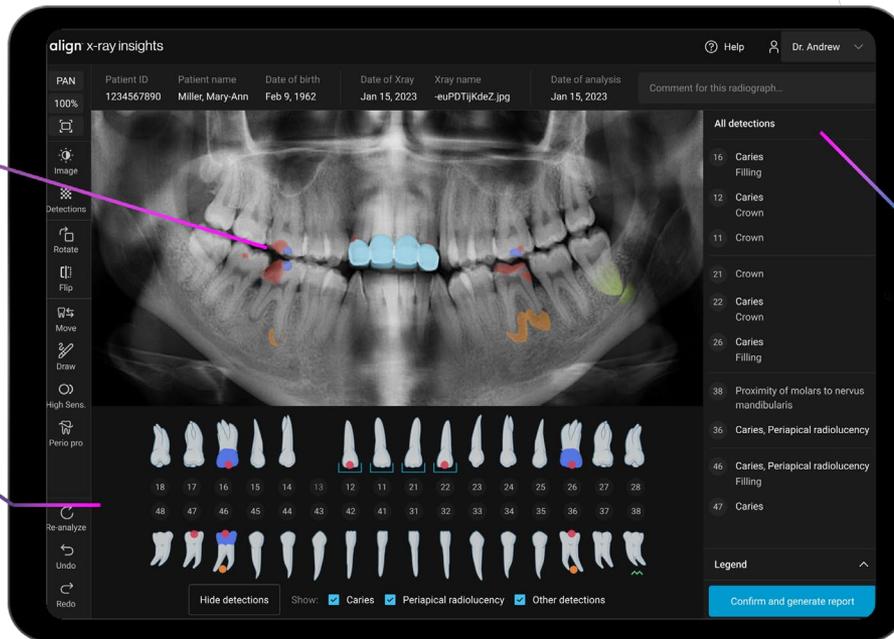
Standardized X-Ray assessments designed to **save time**



Improved patient communication designed to drive **practice growth**

Color-coded annotations

Automatic tooth charting



Interactive list of detections

\*Regulatory approval in limited jurisdictions.

# CHAIRSIDE IN MINUTES

## TREATMENT PLANNING

**Personalized:** YOUR treatments YOUR way



+



+



### Invisalign® Personalized Plan

Reliably, efficiently, and consistently delivers initial treatment plans that doctors expect

### 3D Controls

Full control over treatment planning improves accuracy and efficiency

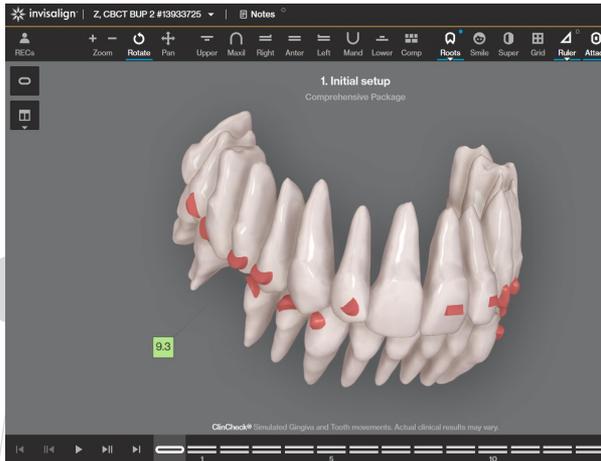
### ClinCheck® Live Update

Visualize treatment planning in real time and approve plans in minutes

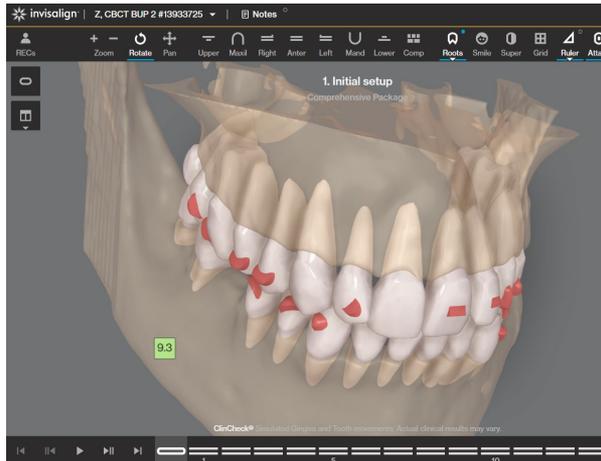
# CHAIRSIDE IN MINUTES

## TREATMENT PLANNING

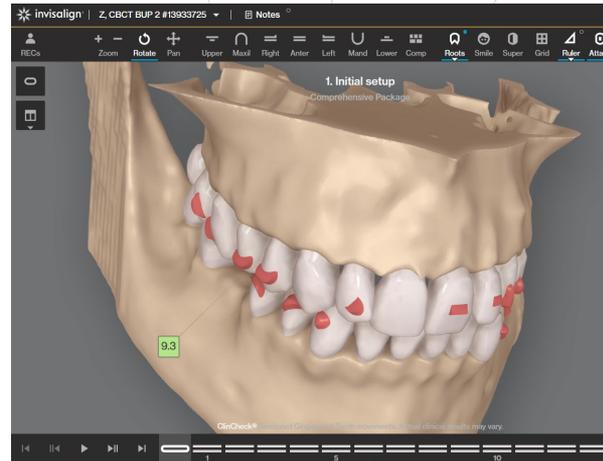
Real root renderings and bone visualizations  
in one integrated platform



Roots only



Roots with semitransparent bone

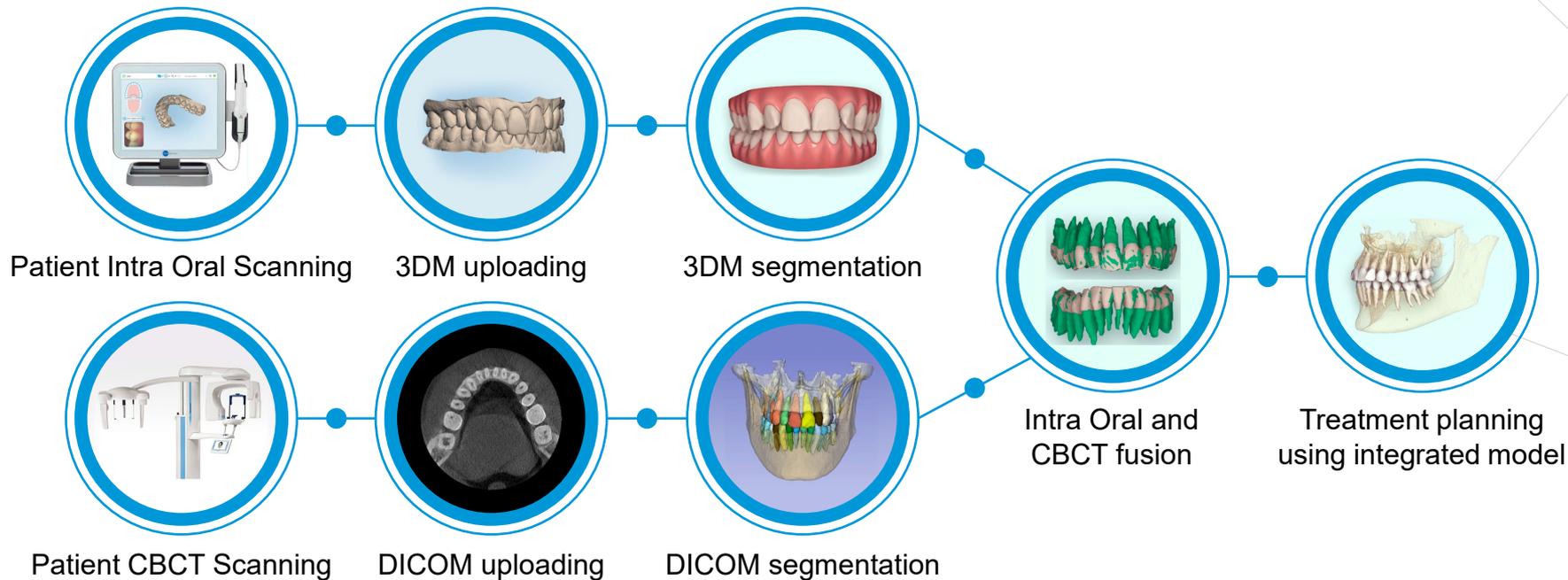


Roots and bone

# CHAIRSIDE IN MINUTES

## TREATMENT PLANNING

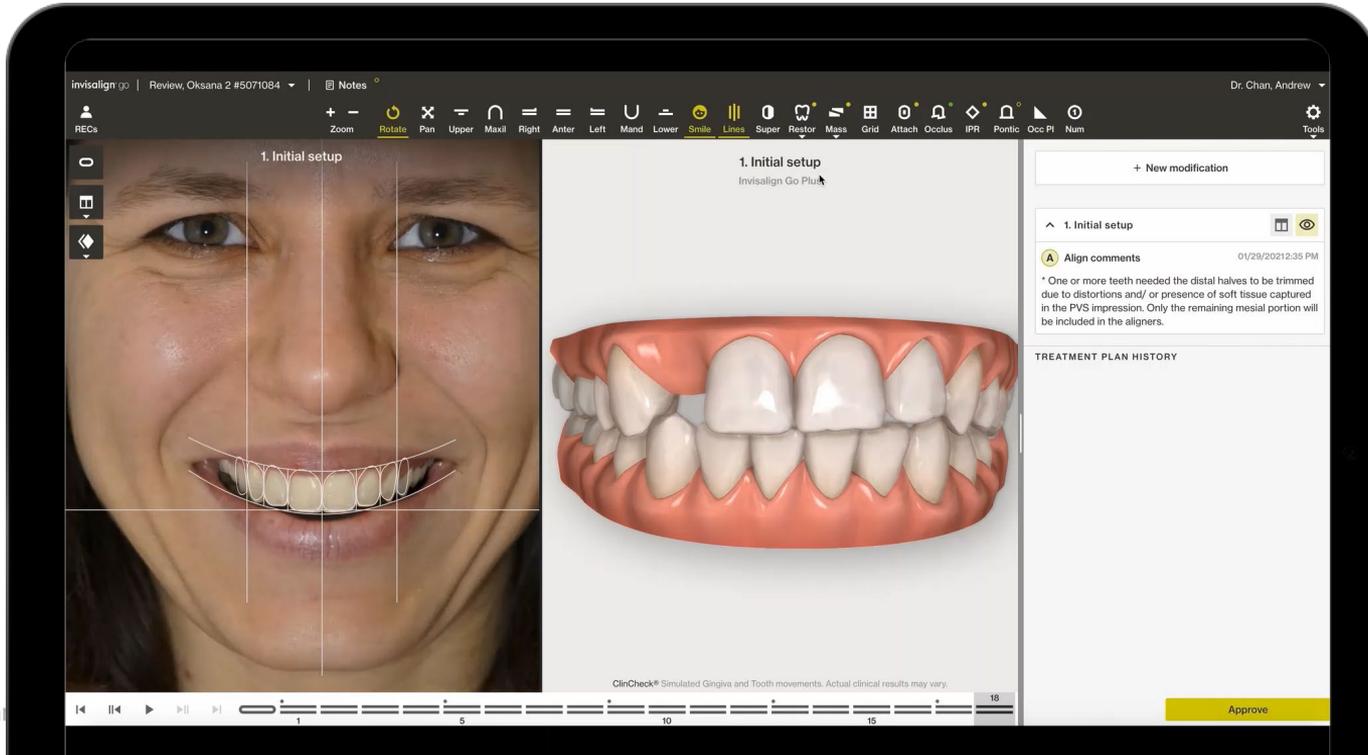
with **real ROOTS**



# CHAIRSIDE IN MINUTES

## • ORTHO RESTORATIVE

### Tooth mass analysis



# CHAIRSIDE IN MINUTES

## • Invisalign® Virtual Care AI



Optimizes practice  
**PRODUCTIVITY**



Provides timely  
**CLINICAL SUPPORT**

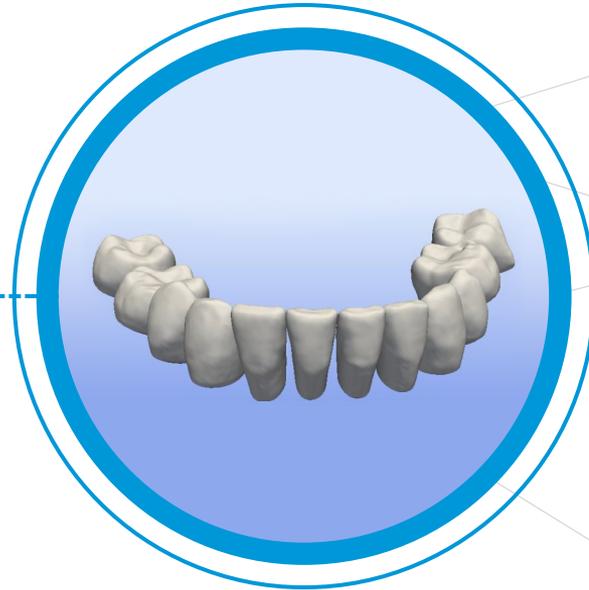


Offers a seamless and  
**INTELLIGENT EXPERIENCE**

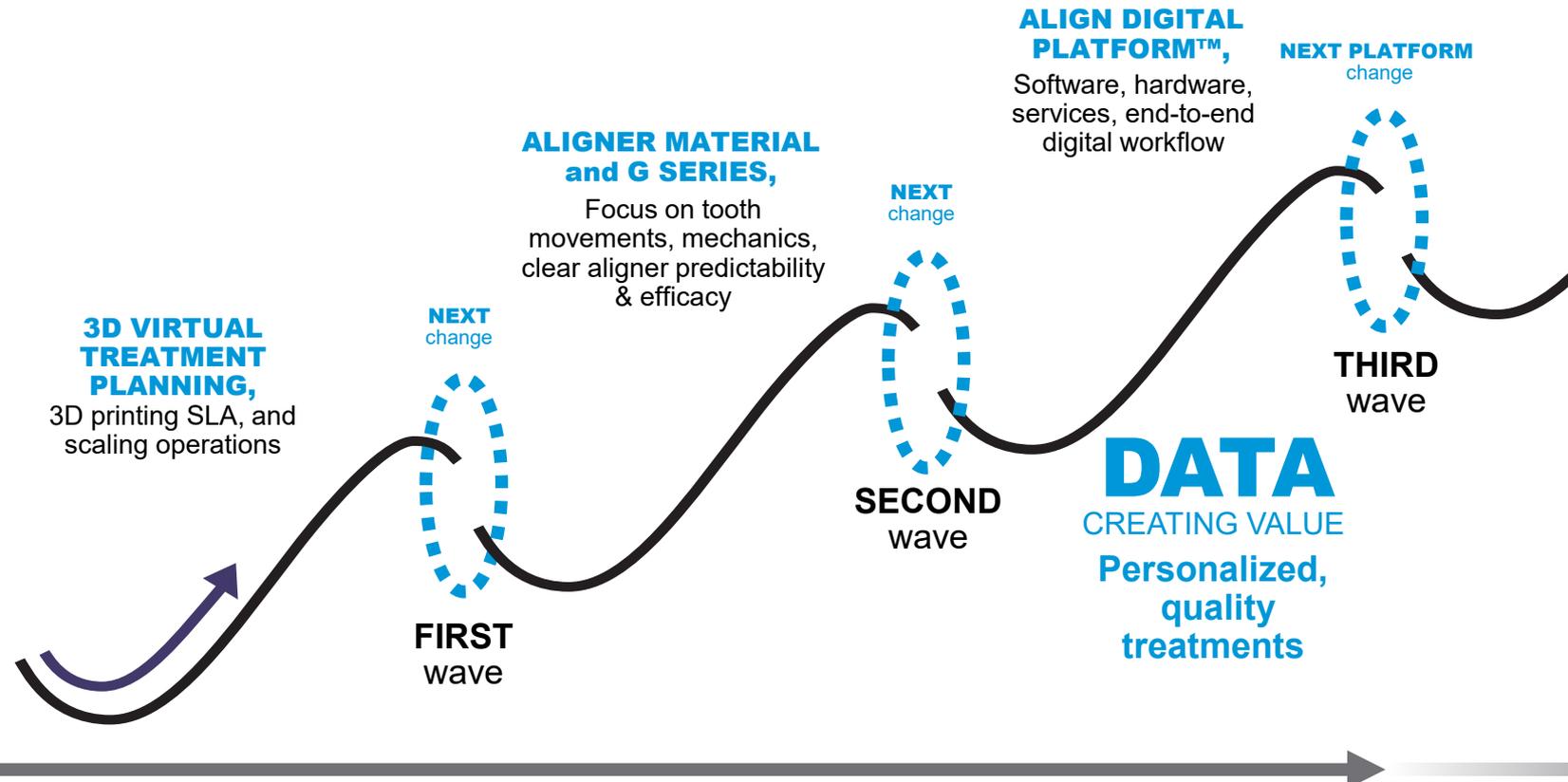
## CHAIRSIDE IN MINUTES

### 3D Machine Learning Reconstruction

Virtually removes braces from intraoral scans with braces



Product Performance | Clinical Efficacy



1997 - 2006

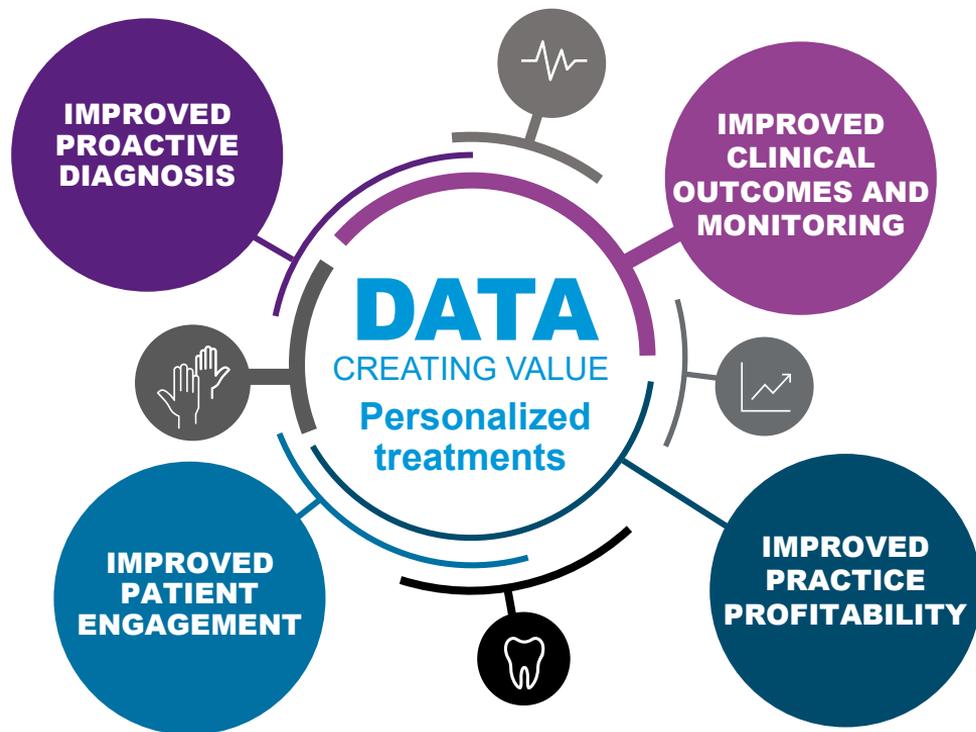
2006 - 2022

2023 - 2030

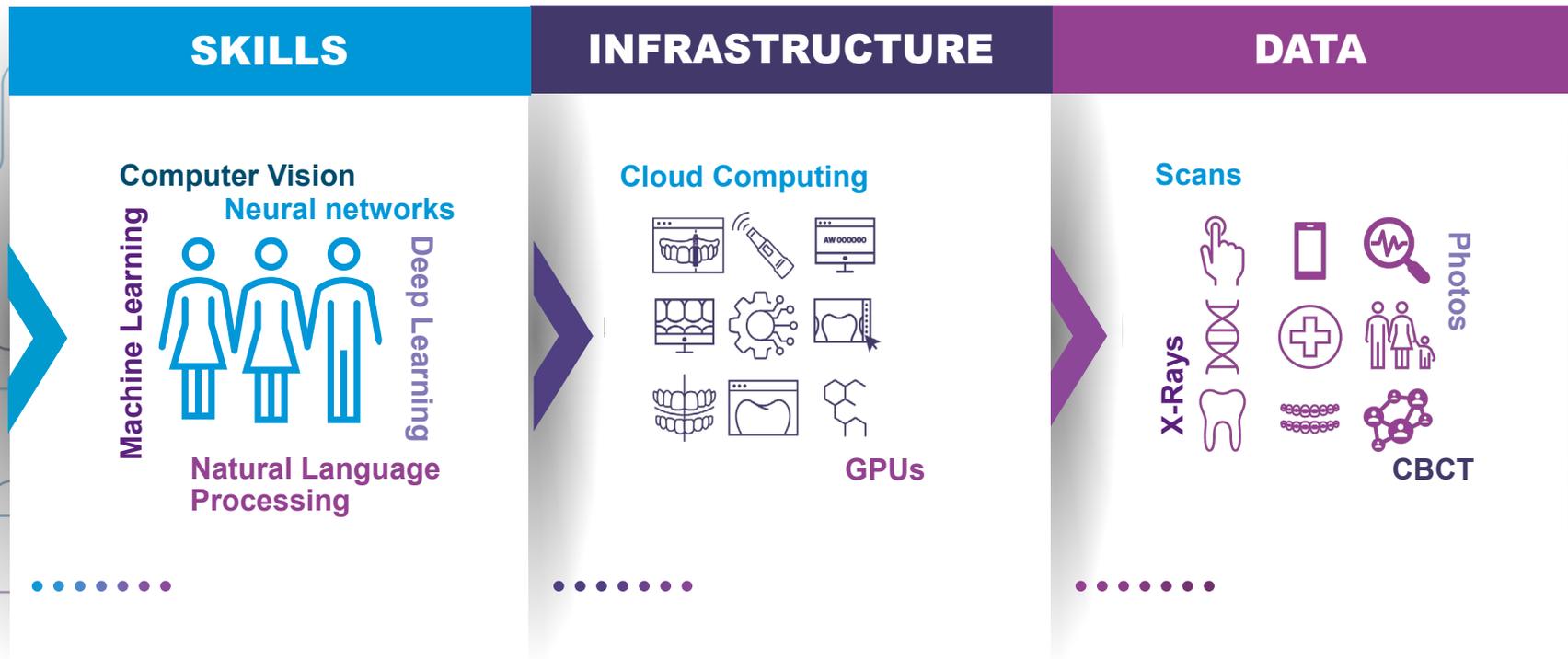
Investment | Time | Engineering

# Data & AI – NEW S CURVE

Shaping the future of Digital Orthodontics



# We own the **FULL STACK AI**



# AI driven **TRUSTED** digital platform

Connected Data and  
New Data Sources

Connected Users  
and Community

Connected Workflows  
and Seamless Experiences



Connect



Scan



Diagnose



Plan



Treat



Monitor



Retain



CONSUMERS  
& PATIENTS



DOCTORS



DENTAL LABS

**align** digital platform™

TRANSFORMING SMILES. CHANGING LIVES.

align™ | ✨ invisalign® | iTero® | exocad®

# Next Generation Breakthroughs in Digital Orthodontic Appliances

**Srini Kaza**

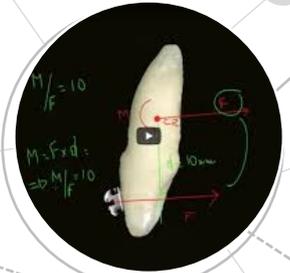
SVP, Product Research & Development



**The most advanced  
clear aligner system  
in the world**



# The science behind the Invisalign smile



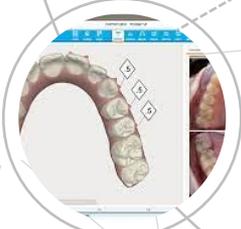
Force system vs. displacement



Doctor prescription



SmartTechnology



ClinCheck® software



iTero™ digital scanner



Clinical effectiveness



Mass customization data & AI



Customer experience

# +26 YEARS

From appliance to platform

Revenue Y/Y%  
LTM 20% - 30%

2001-2023  
**+23%**

## 1997 – 2006

Invisalign® clear aligners  
ClinCheck® software  
Attachments  
3D Printing SLA

## 2007 – 2012

Force system biomechanics  
G-Series  
Vivera™ retainers  
Teen product  
SmartForce™ features  
ClinCheck® Pro  
iTero™ intraoral scanners

## 2013 – 2016

SmartTrack™ material  
Biteramps  
Invisalign® Outcome Simulator  
SmartStage™ technology  
iTero Element™ scanner  
Mandibular advancement

## 2017 – 2023

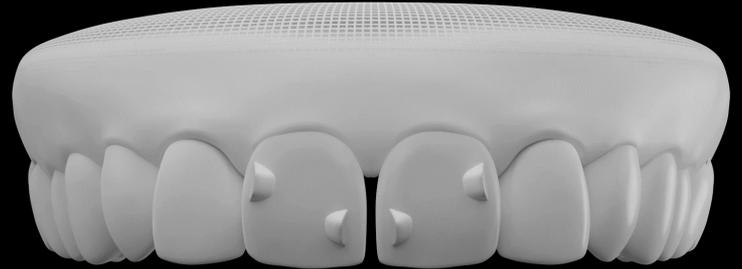
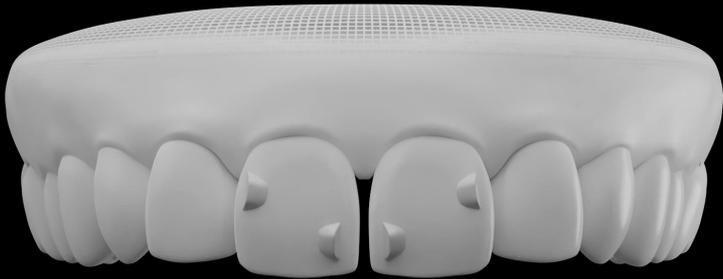
Invisalign First™  
My Invisalign™ app  
iTero Element™ 5D imaging system NIRI  
ClinCheck® Pro 6  
exocad™ lab software  
Invisalign® Virtual Care  
Professional Whitening Subscription  
E-Commerce  
Diagnostics  
Invisalign® Practice App  
Invisalign Smile Architect™  
Invisalign® Virtual Care AI  
Enhanced precision wings for Invisalign treatment with mandibular advancement  
Invisalign® Palatal Expander System  
SmartForce™ attachment-free aligner activation feature  
Plan Editor in ClinCheck® treatment planning software  
Align Oral Health Suite™

\*CAGR based on mid-point of revenue guidance for the full year 2023, as of July 26th, 2023

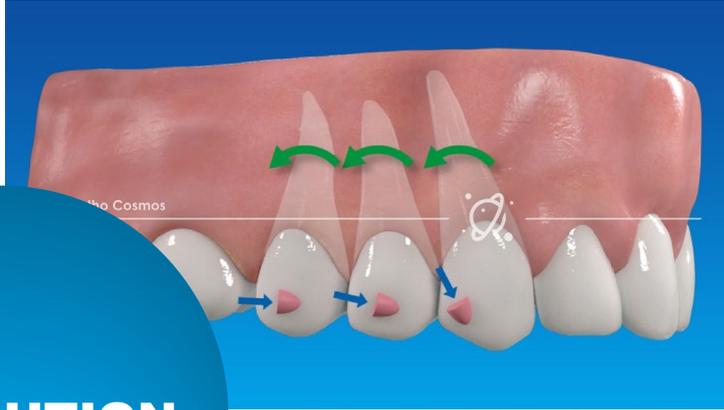
● Software ● New products ● Services

# Our latest aligner innovation: **MINIMAL ATTACHMENTS**

## Attachment Free Aligner Activation



# Next Wave of **INNOVATION**



**REVOLUTION**

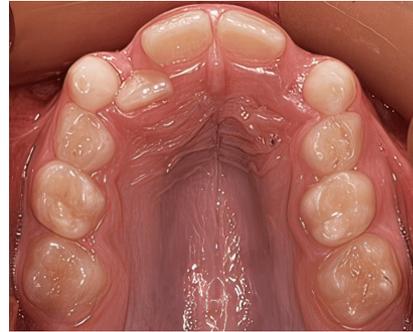
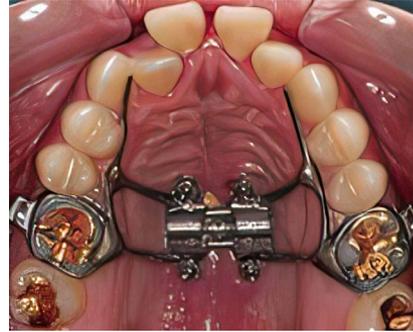


# PALATAL EXPANSION: Current solutions

**Hyrax Appliance**  
(banded)

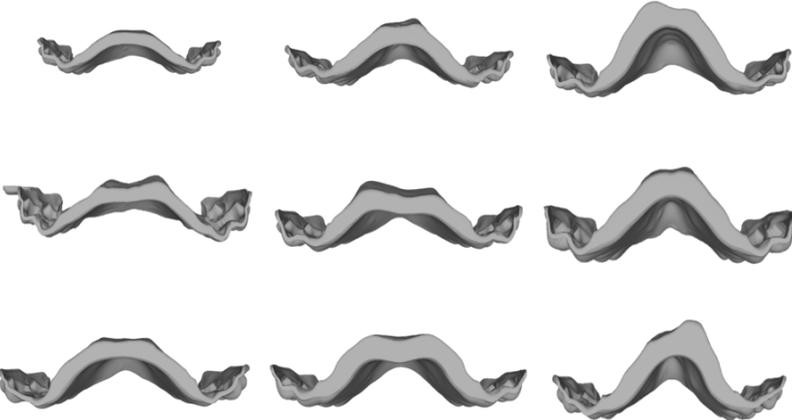


**Micro-Implant Assisted  
Rapid Palatal Expander (MARPE)**



# The Invisalign® **PALATAL EXPANDER**

Generative design to deliver precise force systems



0.25 mm / stage  
Exchanged daily

Expansion  
Order



Stage 1 (Passive)  
Stage 9  
Stage 17  
Stage 25  
Stage 33 (8 mm)

Holding  
(Retainer)  
Order



Stage 1 (Holding Phase)  
Stage 2 (Holding Phase)  
Stage 3 (Holding Phase)

Easy, Safe, Comfortable, **EFFECTIVE**

## HYRAX Bonding



Asker orthodontics



Asker Orthodontic Center

 invisalign®

**Insertion** of the device

# Power of Generative design + AI + ADVANCED 3D PRINTING

**~100** patients treated

**98%** average expansion efficacy after active expansion phase

**6.7mm** average achieved expansion

Design and process transfer to JZ almost complete

”

The device is a game changer. The most annoying part is to turn the screw which we don't have to do for the expander.

– Dr. Walt

”

The results from the three cases we did have been amazing, we achieved what we were looking for.

– Dr. Dumoulin

”

I have not had any emergencies and don't foresee that there would be many.

– Dr. Altalibi

”

It sells itself.

– Dr. Sandra Tai

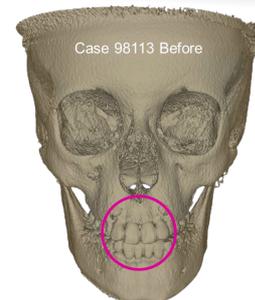
Case 98105 Before



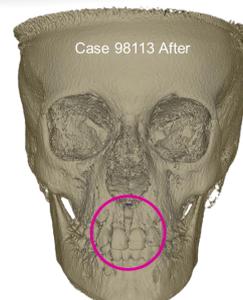
Case 98105 After



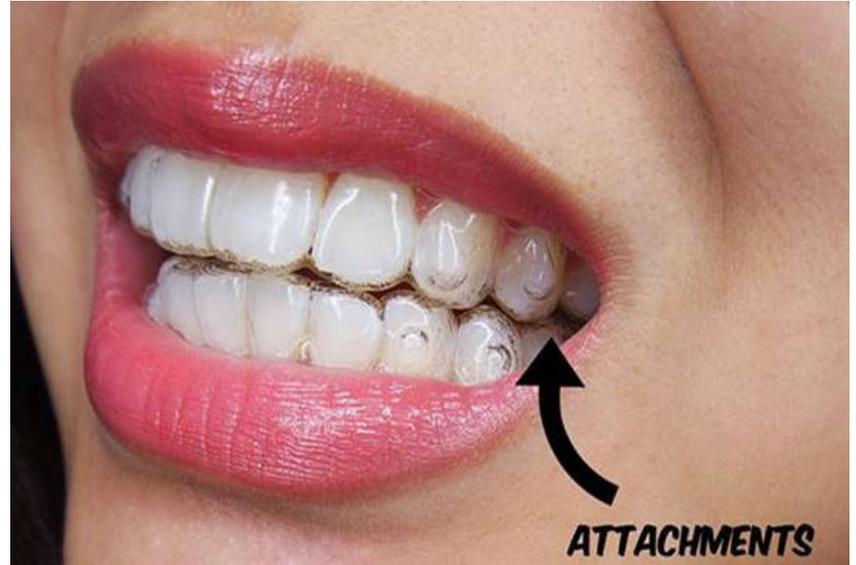
Case 98113 Before



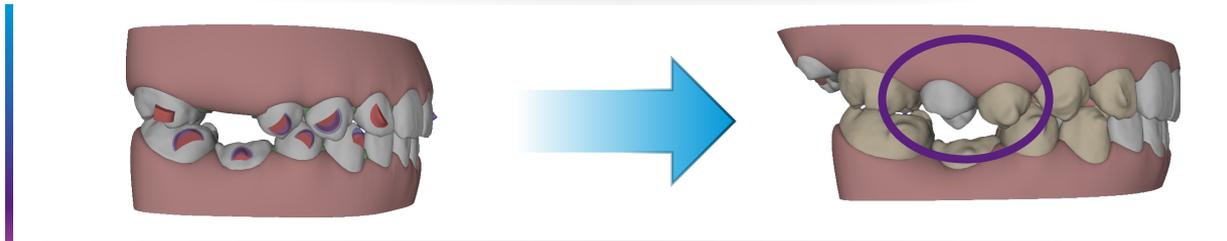
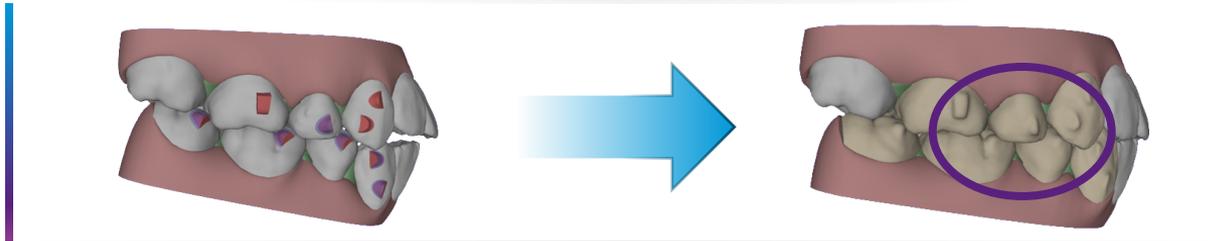
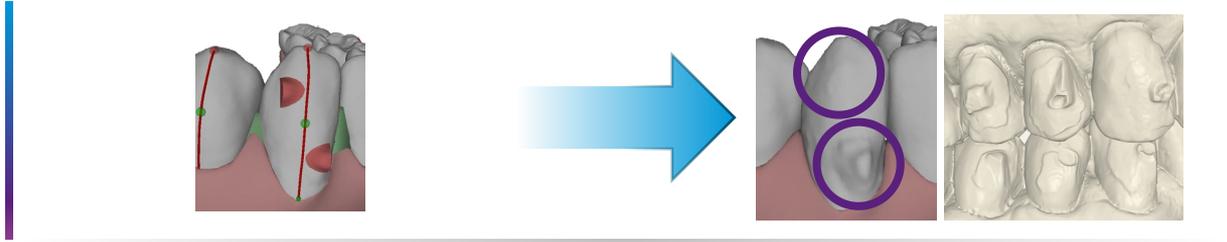
Case 98113 After



# ATTACHMENTS – Current process



# Issue with **ATTACHMENTS**



Our **SOLUTION**



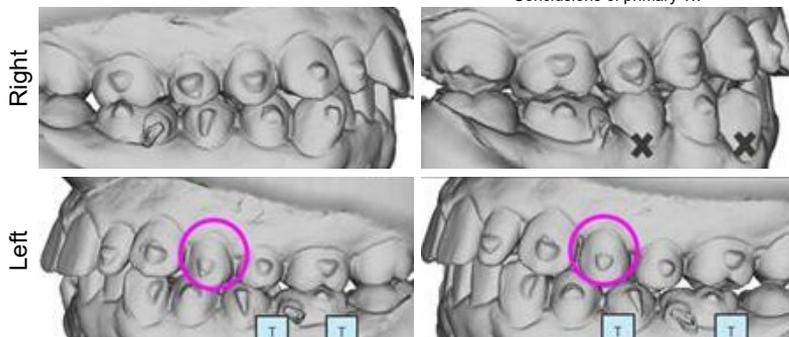
# One step **ONE TIME**

All needed bonding in the mouth – 1 step, 1 time

## GP Advisory Board Hands-On Demo

Scan 01 Insertion

Scan 03 38-week  
Conclusions of primary Tx



Overall, I would rate this a great success and very impressive

– Dr. Sandra Tai

Today we inserted the case in 14.16 mins

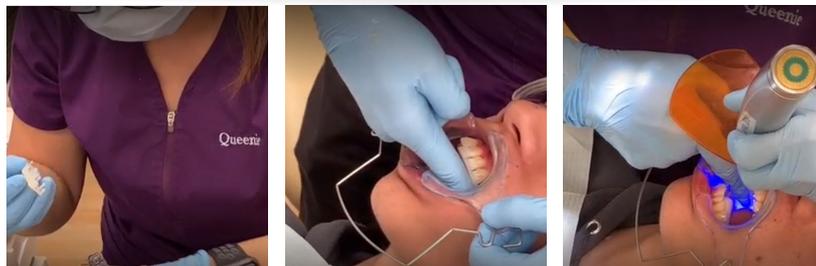
– Dr. Sandra Tai

I did not realize how easy it is to remove until I got my hands on it

– Dr. Andrea Ho-Fatt Wang

I don't place attachments in my practice (my staff does), but I will start doing it if it's this easy

– Dr. Steven Lialo



# Anatomy of an **ALIGNER**



**ELASTICITY**



**MODULUS**



**FORCE V. TIME**

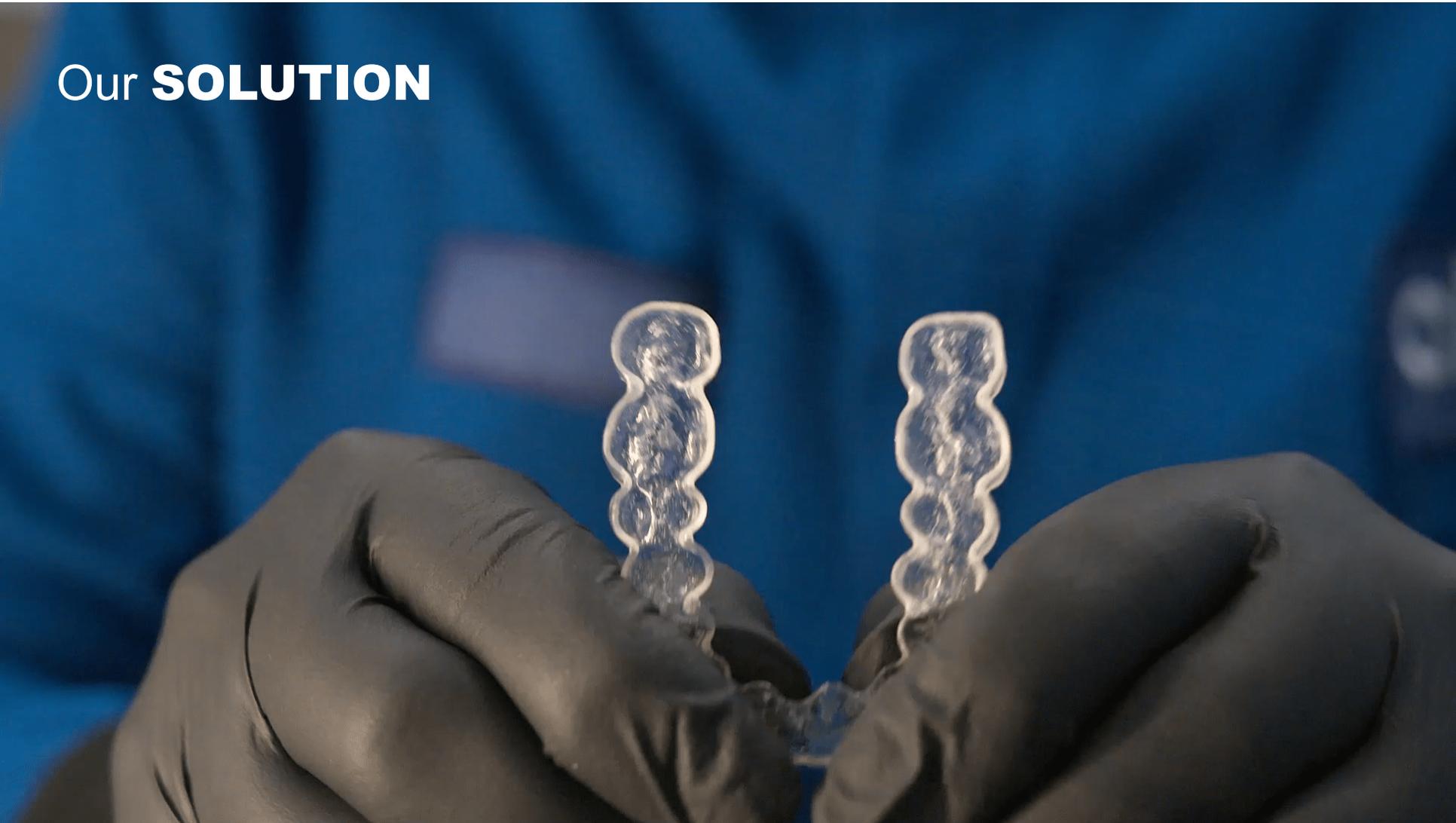


**SAFETY**



**AESTHETIC**

Our **SOLUTION**





## 3D Printing high performance devices



**SOFTWARE**

**PRINTERS**

**DESIGN**

**MATERIALS**



# High viscosity polymer printing with **CUBICURE**

Align to acquire privately held Cubicure



# Over 25 years of **INNOVATION** & **IMPROVEMENT AT SCALE**

Continuous **INNOVATION** while **DELIVERING GROWTH**

Enabling significant improvements in **PERFORMANCE,**  
**THROUGHPUT AND SAVINGS**

No competitor can do what we do **AT SCALE**

# KEY TAKEAWAYS

We continue to be the **INNOVATION LEADER**  
with the **CURRENT GENERATION TECHNOLOGIES**

We are starting the next generation of products – using the power  
of **3D PRINTING, AI, BIOMECHANICS AND DESIGN**

This will result in the creation of devices that will create a  
**SIGNIFICANT ADVANTAGE FOR US IN THE FUTURE**

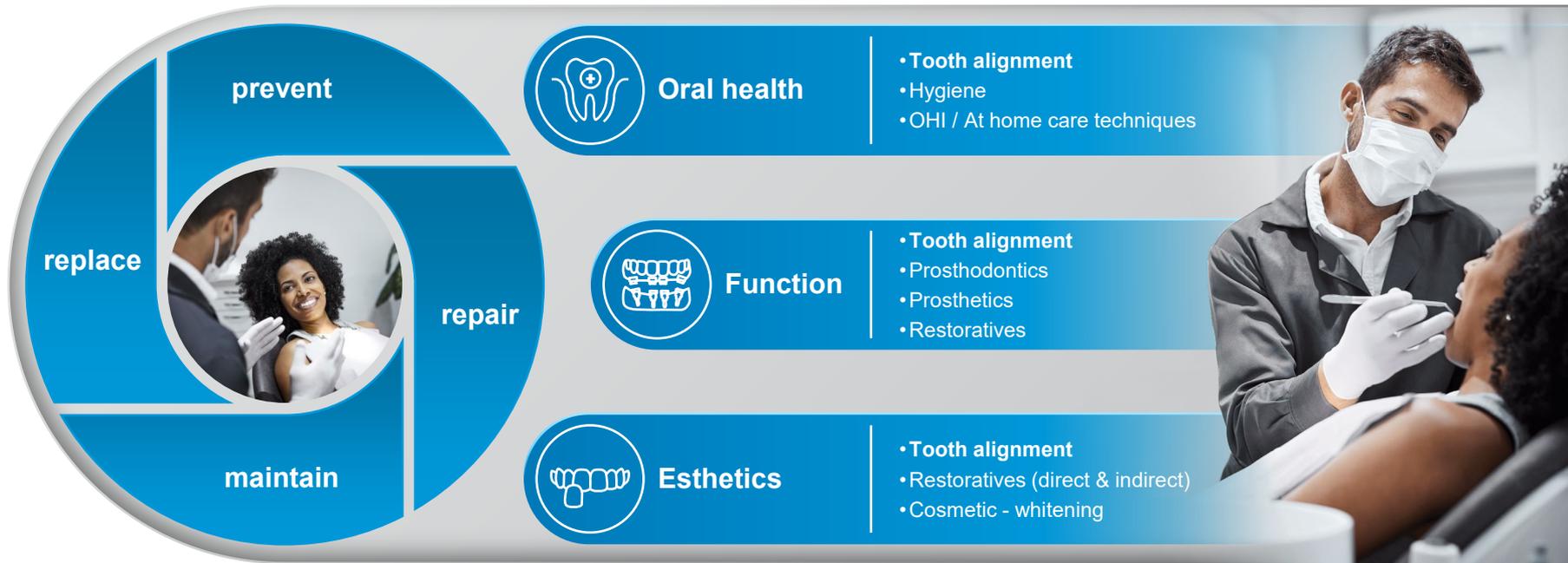
# Comprehensive dentistry: The value of tooth movement in general dentistry

**Zelko Relic**

EVP & Chief Technology Officer

# Comprehensive dentistry

Holistic interdisciplinary care to optimize a patient's oral & dental health

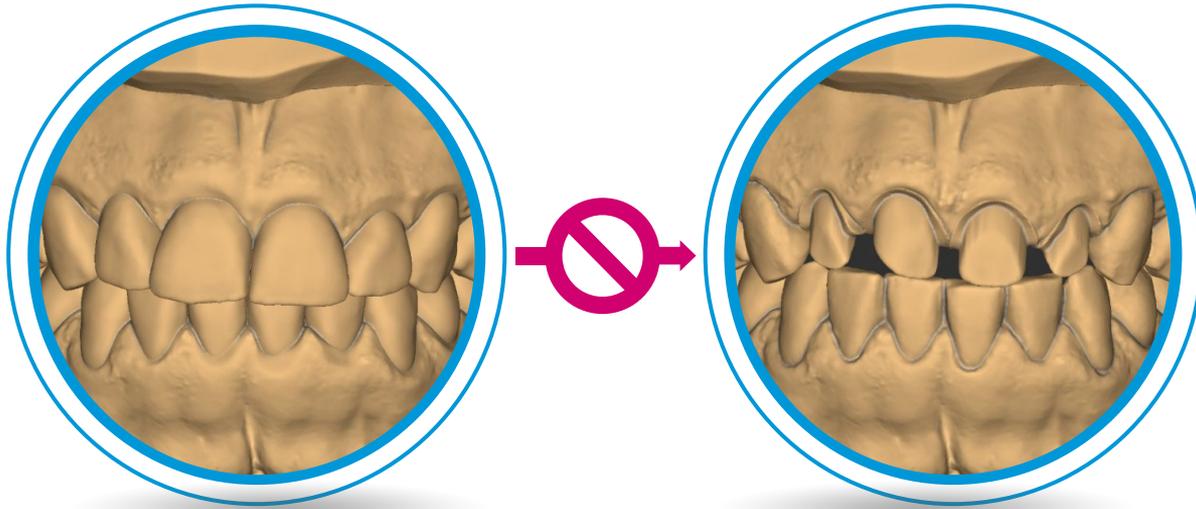


# Mastering comprehensive dentistry with **digital technology**

- **Comprehensive dentistry** is best for the patients and will become the standard of care in the future – mastering it means success
- **Digital technology** increases clinical knowledge, confidence and efficiency to successfully practice comprehensive digital dentistry and drive practice growth
- All technology required is being developed and delivered within **Align Digital Platform™**, with solutions throughout the treatment journey:
- **Connect, Scan, Diagnose, Plan, Treat, Monitor, Retain**



# Ortho-restorative = Best treatment outcomes



function

stability

health

longevity

aesthetics



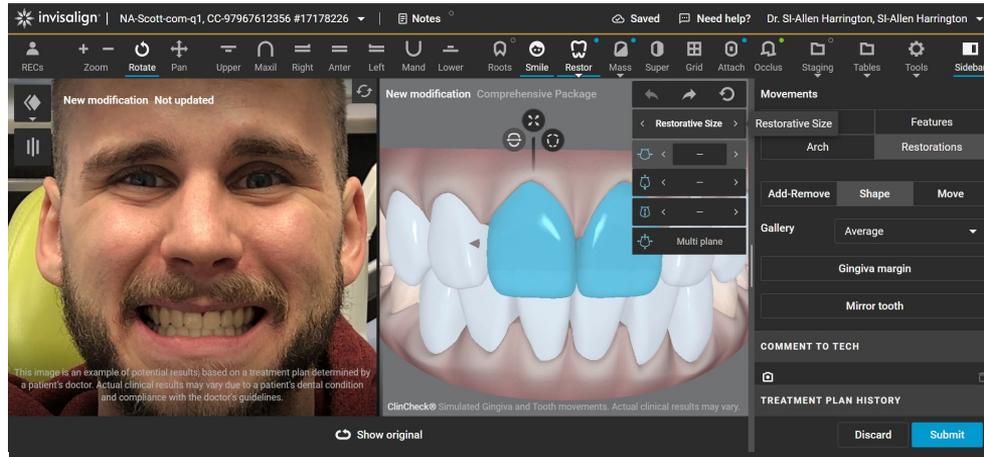
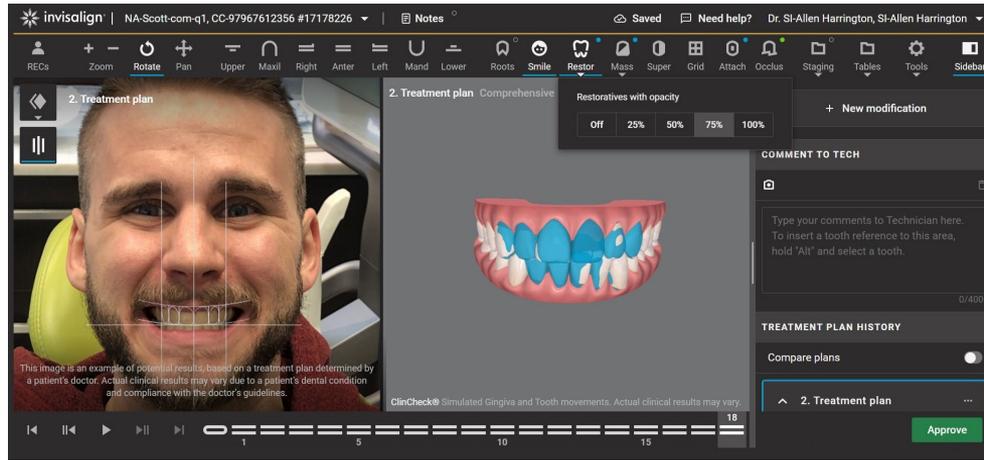
# TOOTH ALIGNMENT

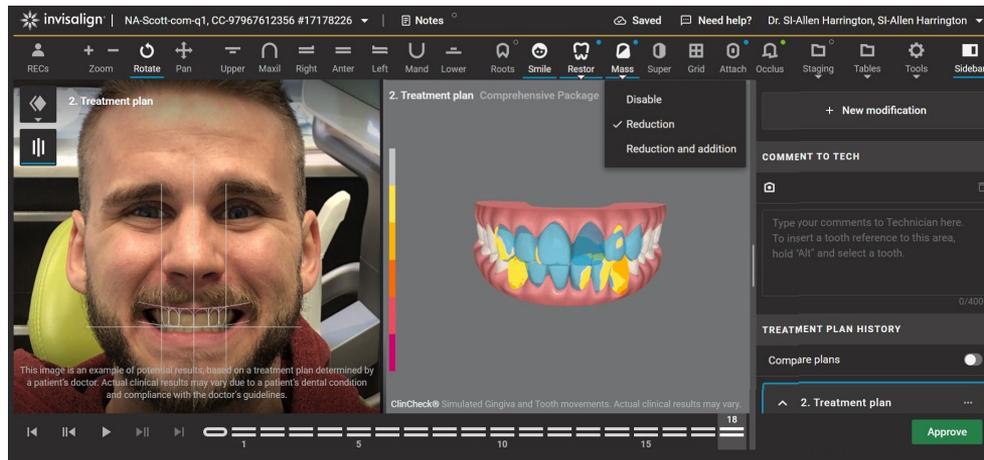
the Standard of  
Care in Dentistry



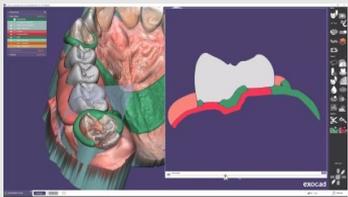
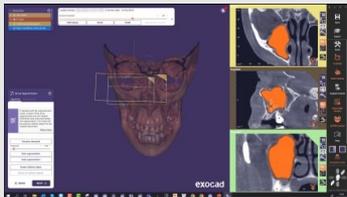
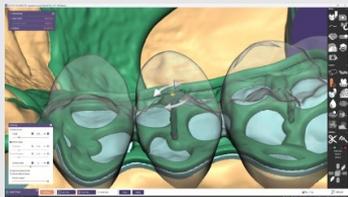
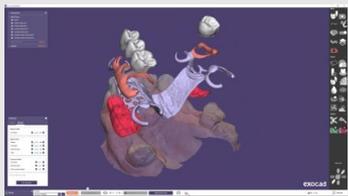
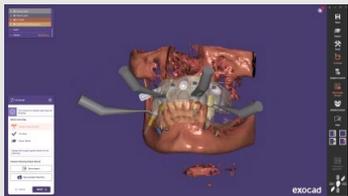
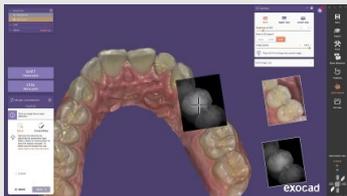
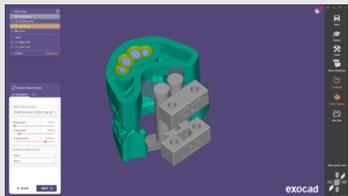
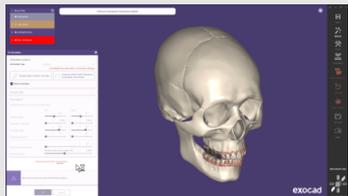
# Invisalign Smile Architect™ Ortho-Restorative Treatment Planning Software

Comprehensive Dentistry in ClinCheck® Software

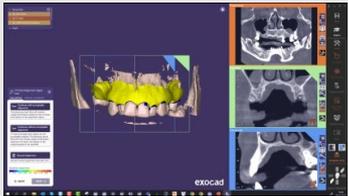
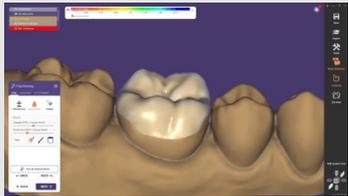
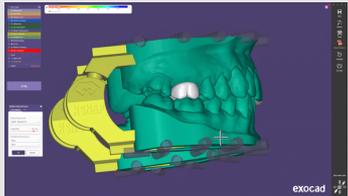
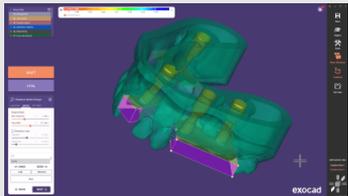
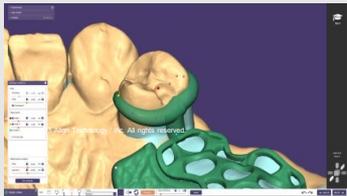
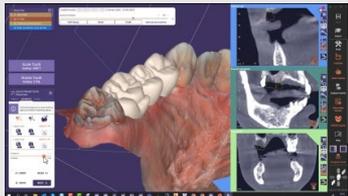
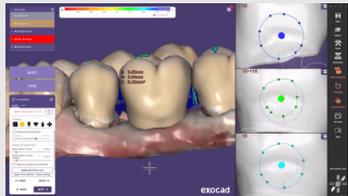
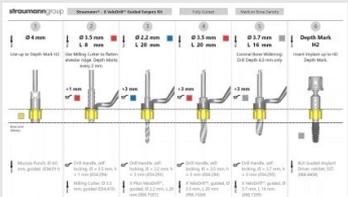


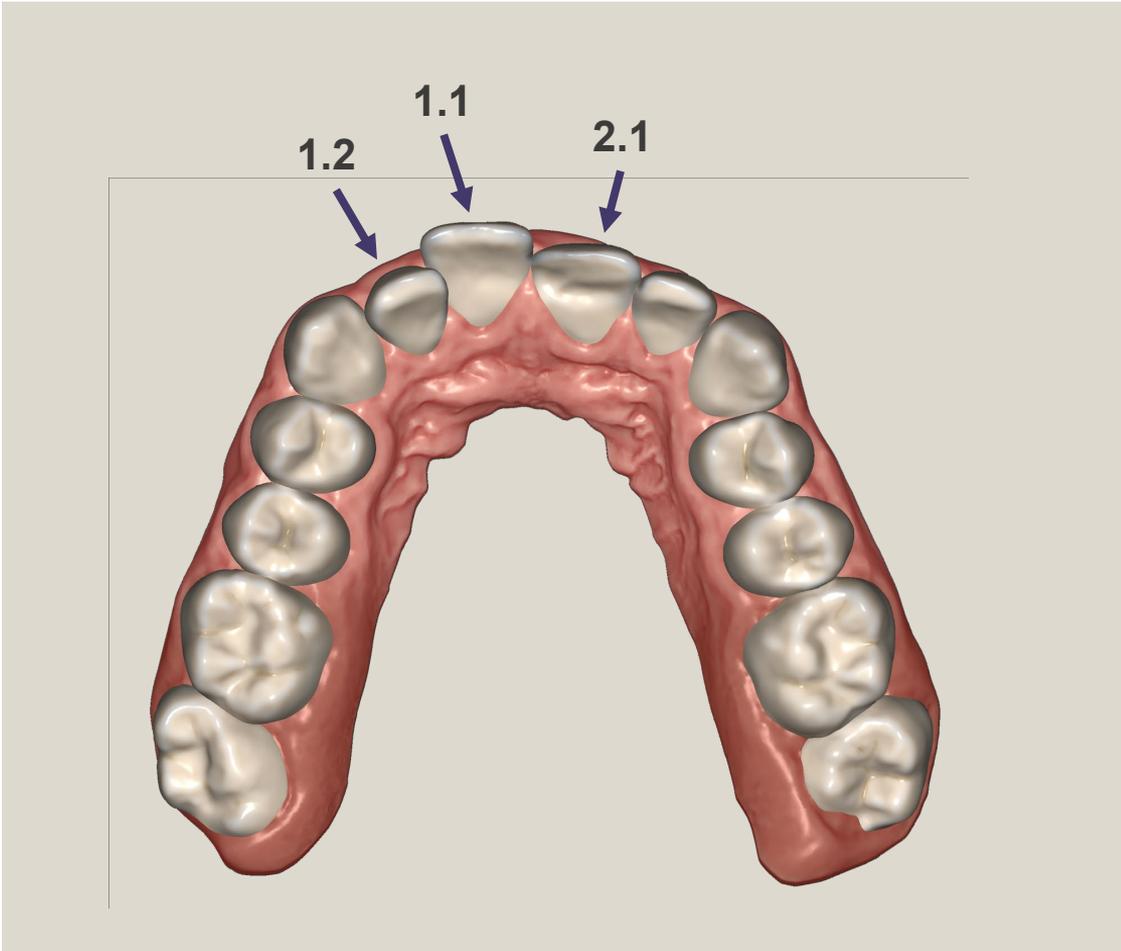


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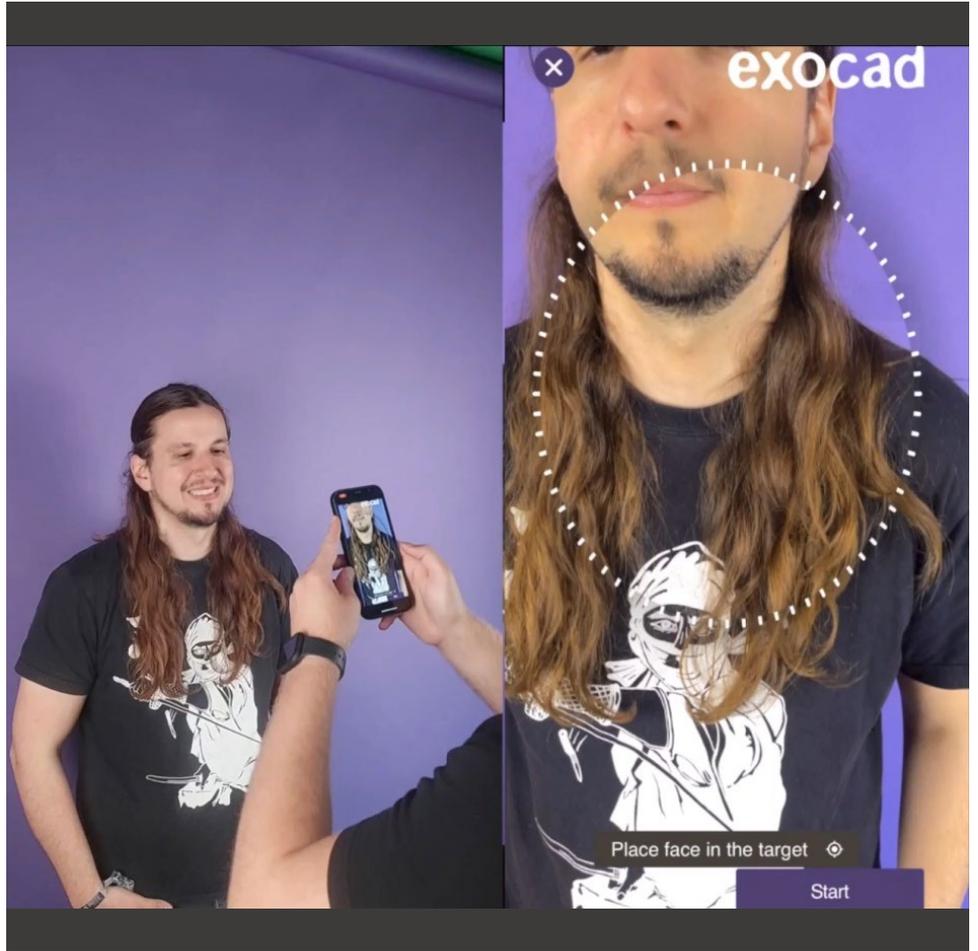


exocad™









Treatment plan options

Include the following:

- Restorative
- Final outcome only
- Est. tooth reduction
- Virtual gingiva

Restorative type:

Veneers  Crowns

Plan situation:

Initial  Ortho

Toggle teeth visibility

Show/Hide

- 2D Images
  - Patient teeth - Ortho-planned
  - Patient teeth - Restorative
  - Patient teeth - Neighboring
  - Gingiva design parts
    - Restorative Ortho tooth models
    - Restorative adapted tooth models
    - Min. thickness
    - Reduced teeth
    - Reduction boxes
    - Protected estimated pulp zones
    - Reduction surfaces
    - Reduction margins
    - Excluded from treatment plan
    - Smile Creator Helpers
- Teeth
  - Lower arch
  - Upper arch
- Hidden  SHOW ALL  Auto Hide

Smile Creator Preview

Teeth color  Gingiva design  Light/Shades

Standard color selection

Use 2D color bar

D01	D02	D03	D04	A1
A2	A3	A35	A4	B1
B2	B3	B4	C1	C2
C3	C4	D2	D3	D4

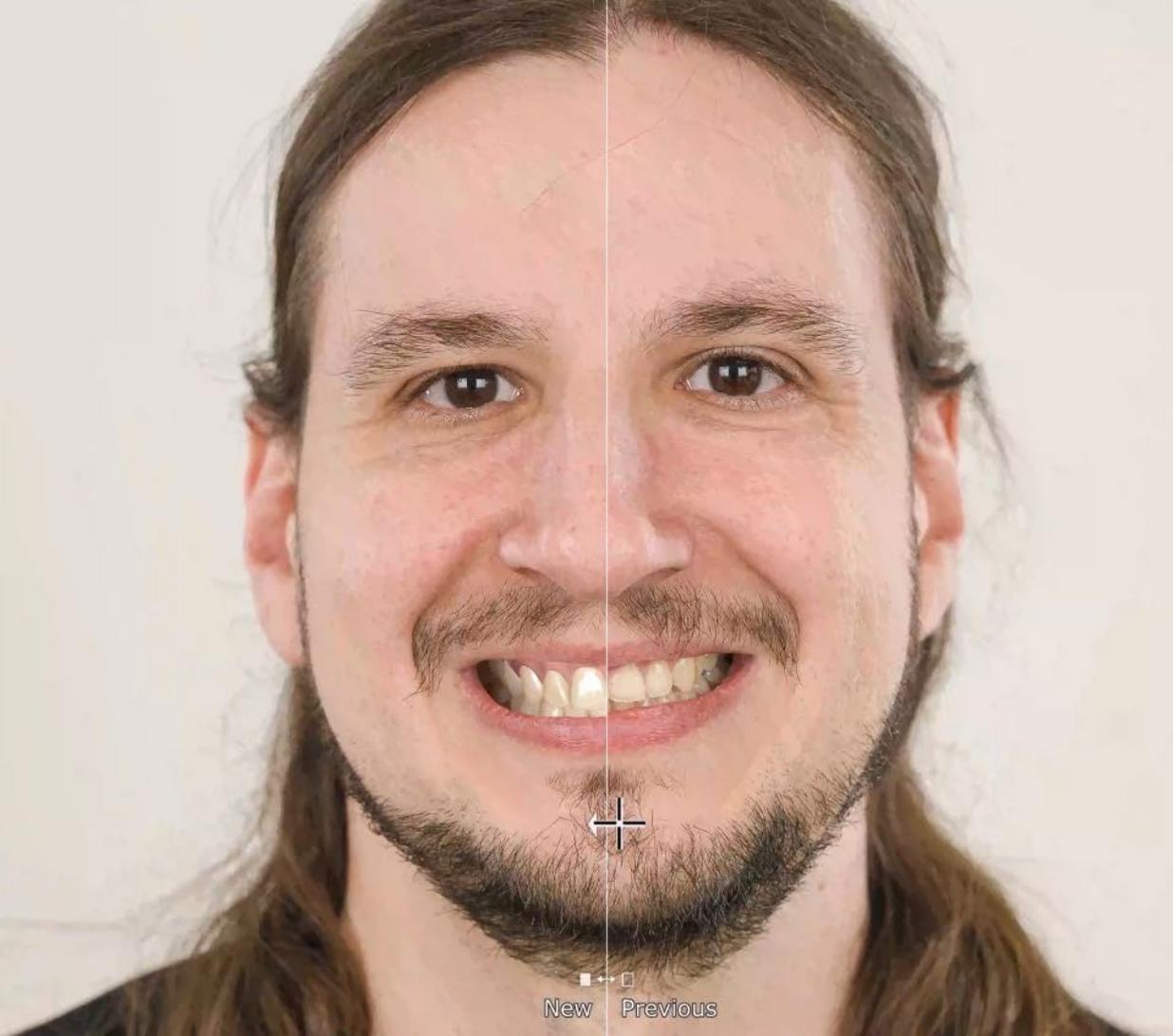
Adjust tooth color

Custom color selection

Visual properties

Export smile image

← BACK NEXT →



New Previous

exocad

Save

Wizard

Tools

Show distances

TruSmile

Color/Texture

Cut view

Tooth reduction view

ADD CUSTOM VIEW

Home Design View

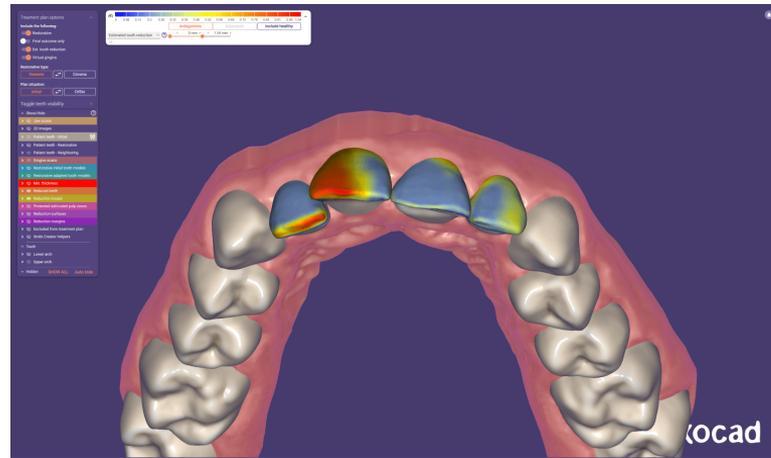
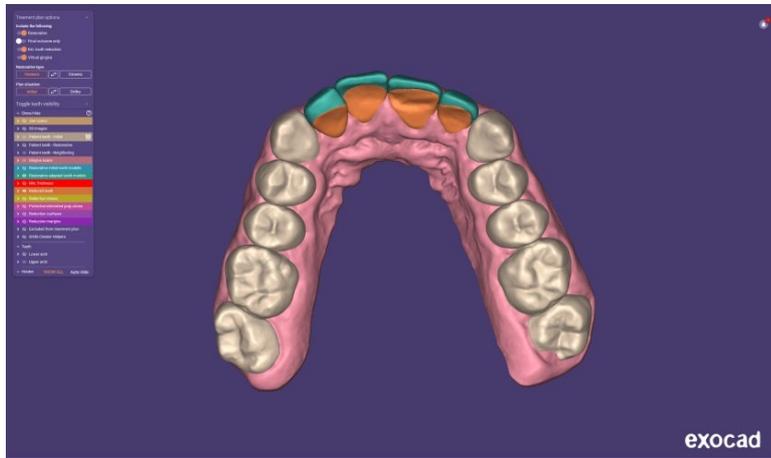
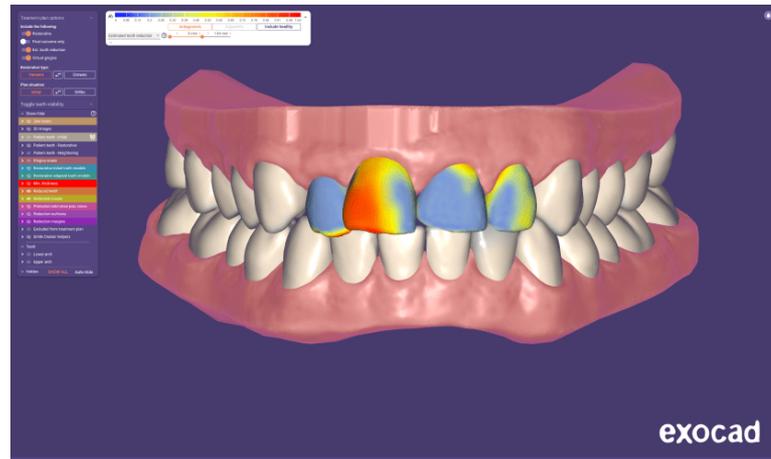
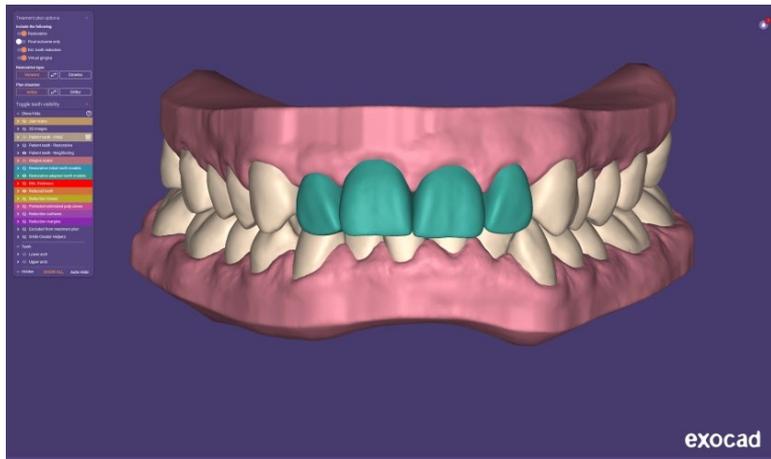
V.1

V.2

Preview

Render/View Close

v3.2.5006/v3



1. Initial setup Comprehensive Package



COMMENT TO TECH

Screen capture

Type your comments to Tech  
To insert a tooth reference tooth

TREATMENT PLAN HISTORY

Compare plans

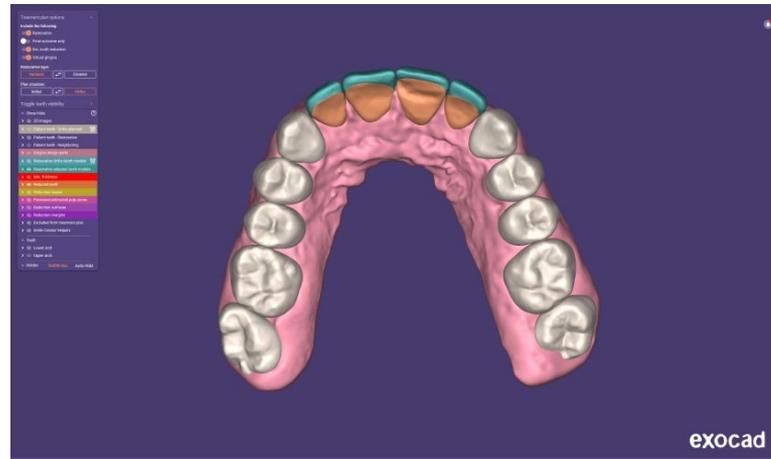
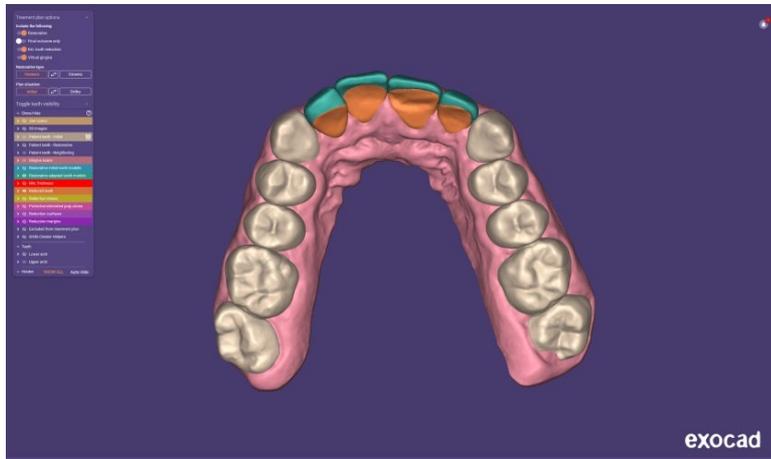
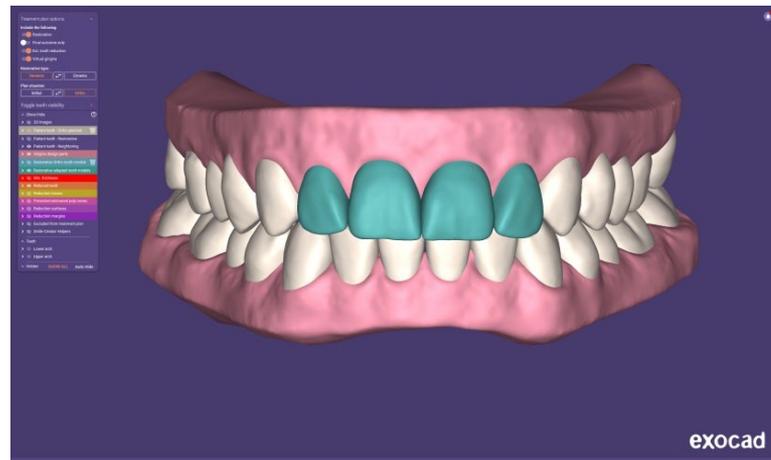
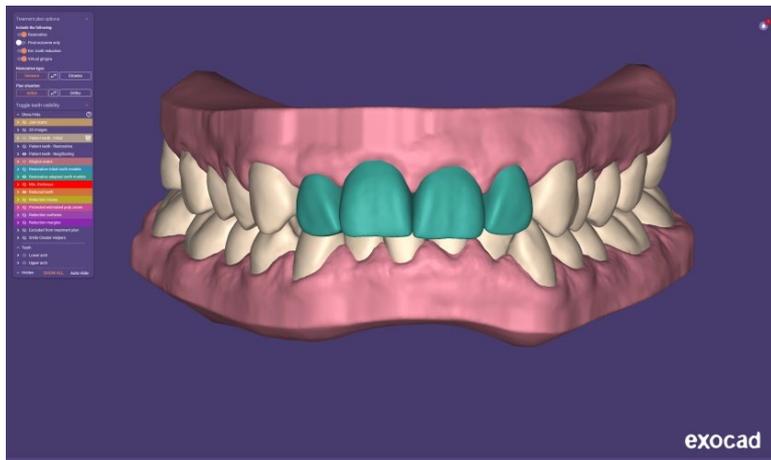
1. Initial setup

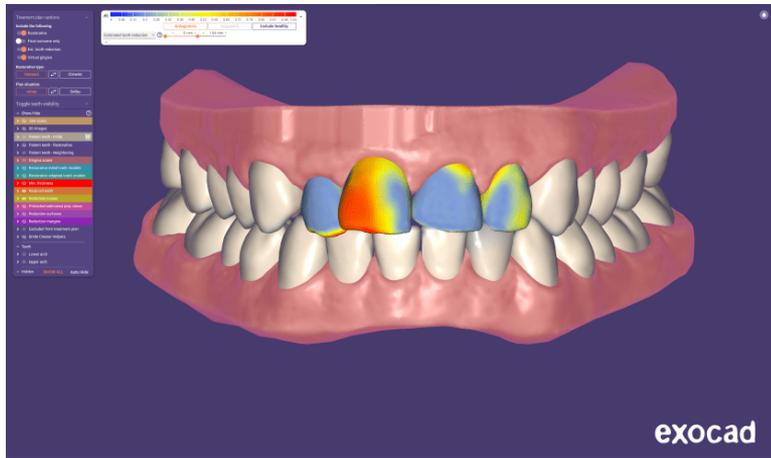
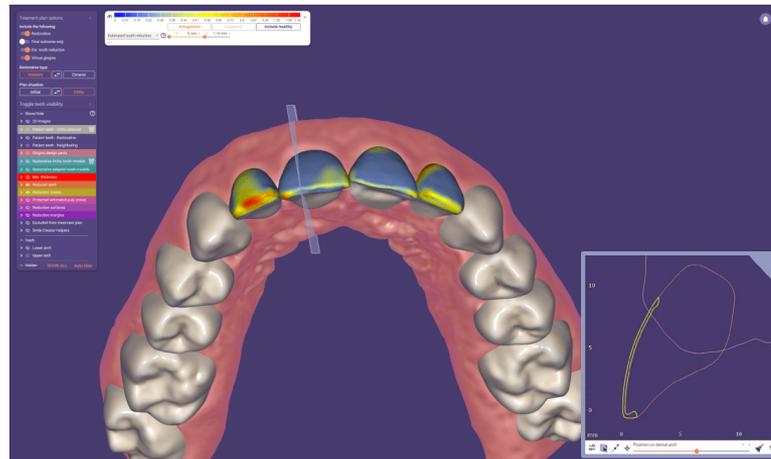
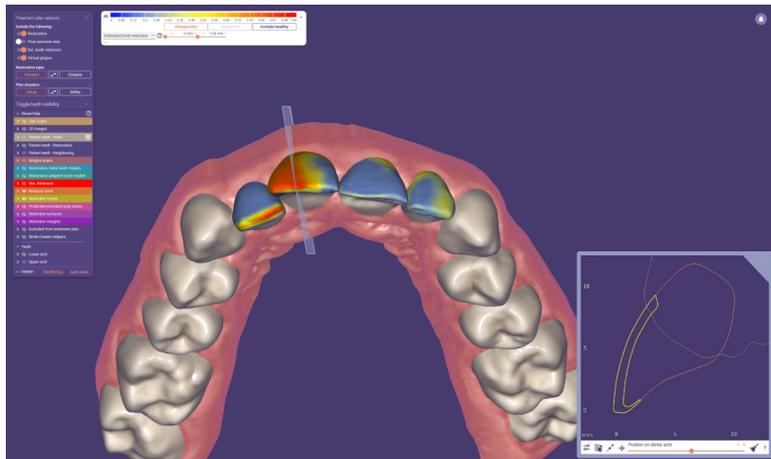
Align comments

\* Optimized Multiplane Attach  
the lateral incisor when there  
movement.

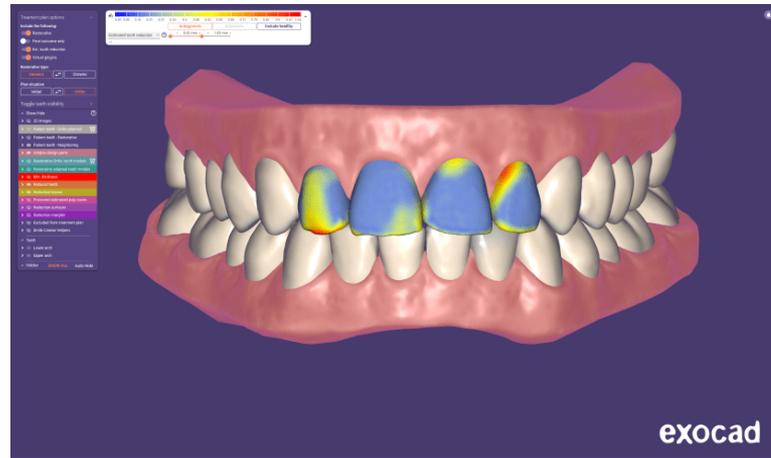
\* SmartForce aligner activat  
canines teeth for intrusion

\* SmartForce aligner activat  
Attachments placed on the p

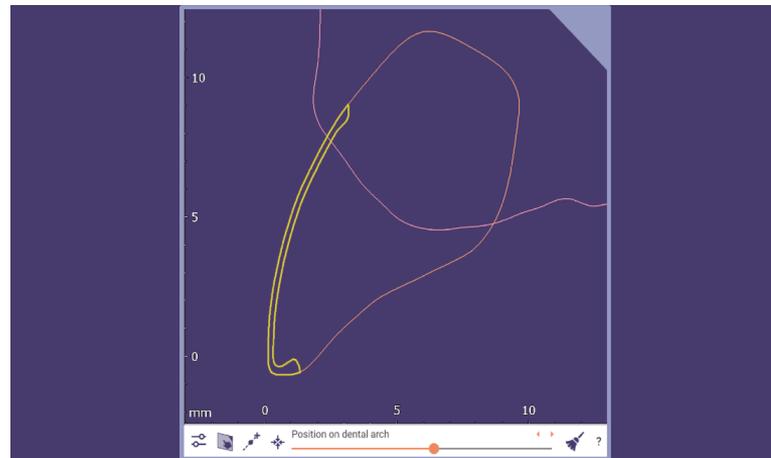
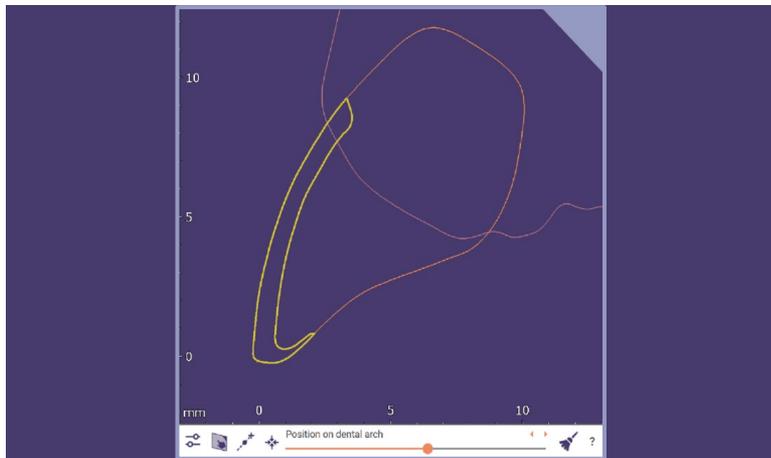
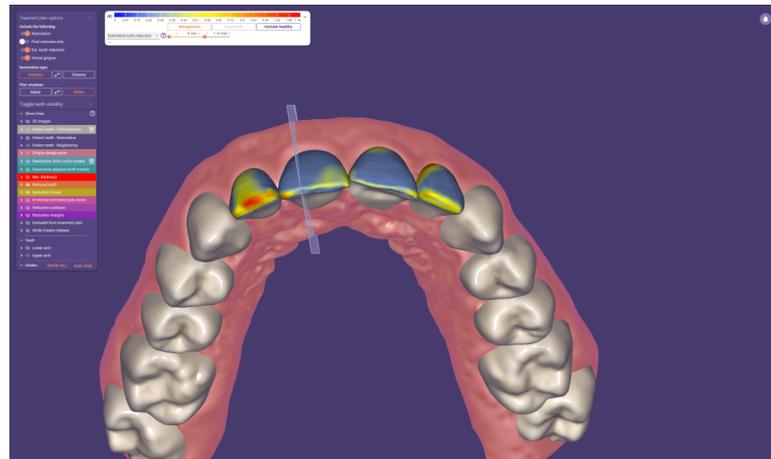
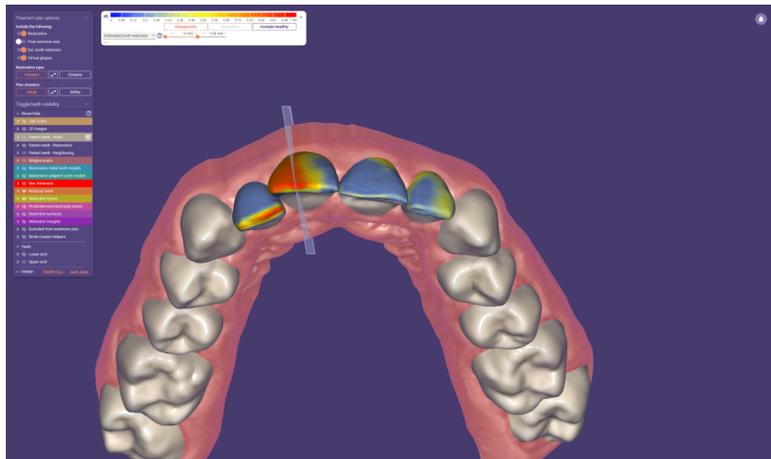




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Estimated Tooth Reduction Inspector

Selected teeth: 11

18 17 16 15 14 13 12 11 21 22 23 24 25 26 27 28

48 47 46 45 44 43 42 41 31 32 33 34 35 36 37 38

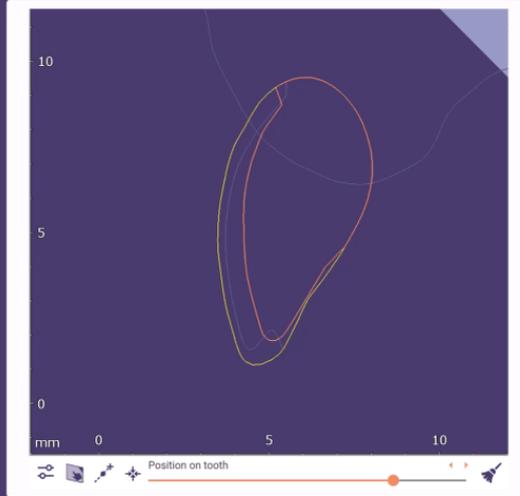
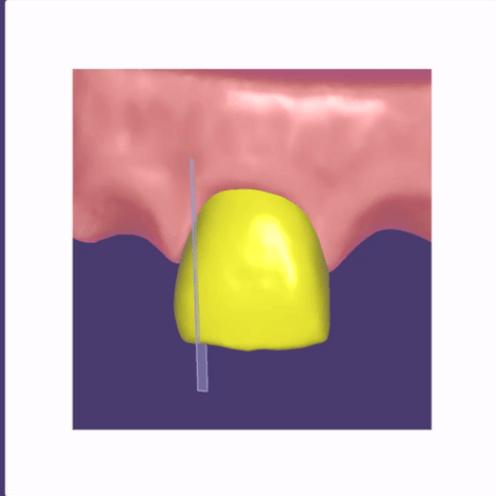
Cut Planes

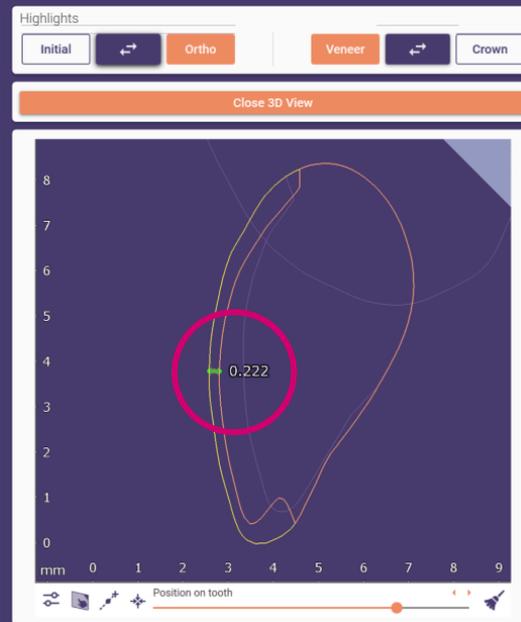
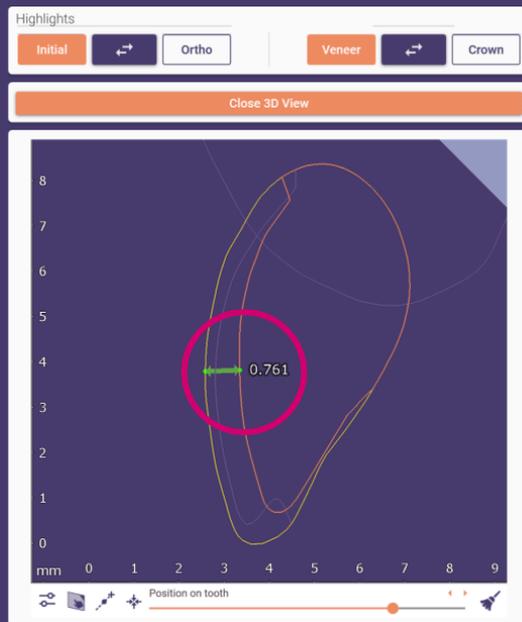
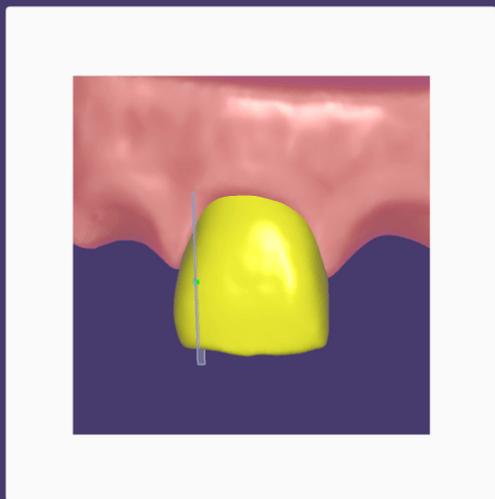
Buccal/Lingual Mesial/Distal Intrusion/Extrusion

Highlights

Initial Ortho Veneer Crown

Close 3D View











**Comprehensive**  
Digital Dental  
Platform

**iTero™**

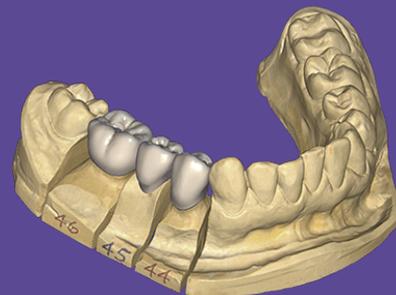


Bringing all digital  
dentistry solutions  
together to achieve  
superior patient  
outcomes

 **invisalign®**



**exocad™**



Transforming



changing lives

align™ | ✨ invisalign | iTero | exocad

# Leading Digital Transformation Starts with iTero™

**Karim Boussebaa**

EVP & MD

iTero scanner and services business

# align digital platform™

TRANSFORMING SMILES, CHANGING LIVES.



Connect



Scan



Diagnose



Plan



Treat



Monitor



Retain



CONSUMERS  
& PATIENTS



DOCTORS



DENTAL LABS

**Comprehensive**  
Digital Dental  
Platform

**iTero™**

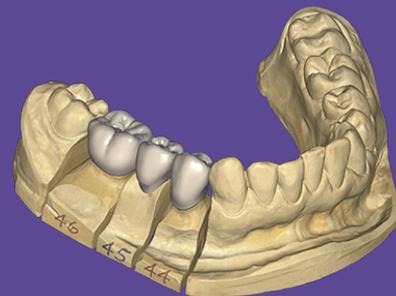


Bringing all digital  
dentistry solutions  
together to achieve  
superior patient  
outcomes

 **invisalign®**



**exocad™**



# 90K+ iTero™ scanners worldwide



**iTerо  
Element Flex™  
& CPO**



**iTerо  
Element® 2**



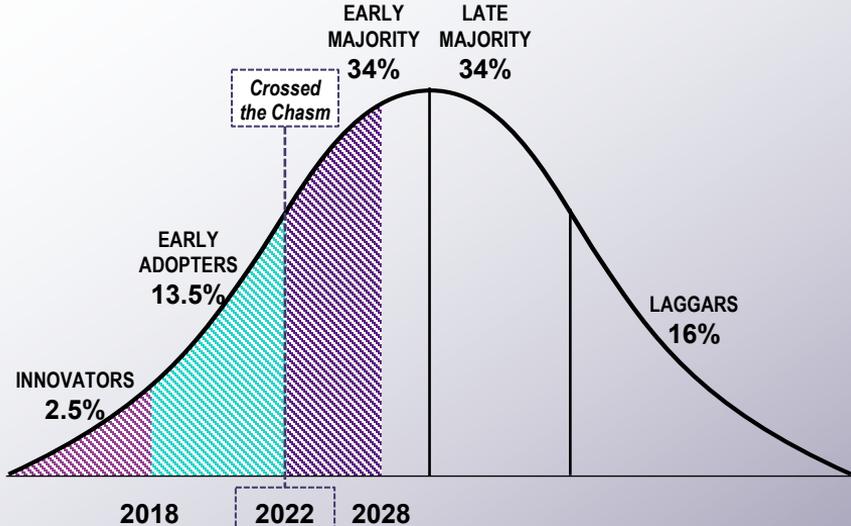
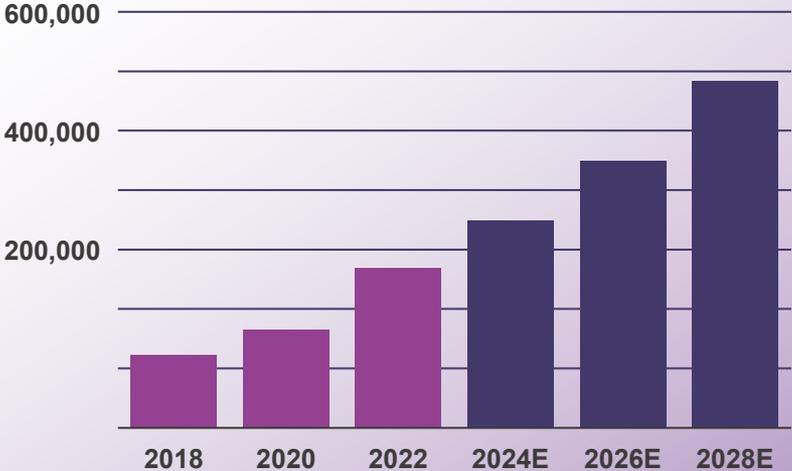
**iTerо  
Element® 5D**



**iTerо  
Element® Plus Series**

# Long runway for continued adoption and **GROWTH**

Global IOS

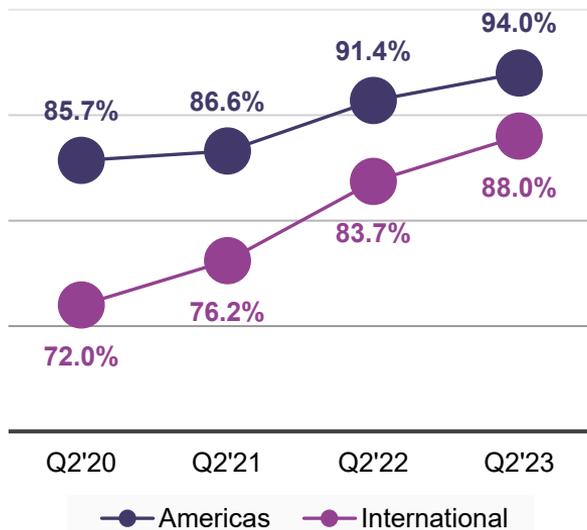


Internal estimates based on 3<sup>rd</sup> party report, internal sales data and additional analysis

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# Accelerating Digital Practice Transformation with iTero™ Scanners

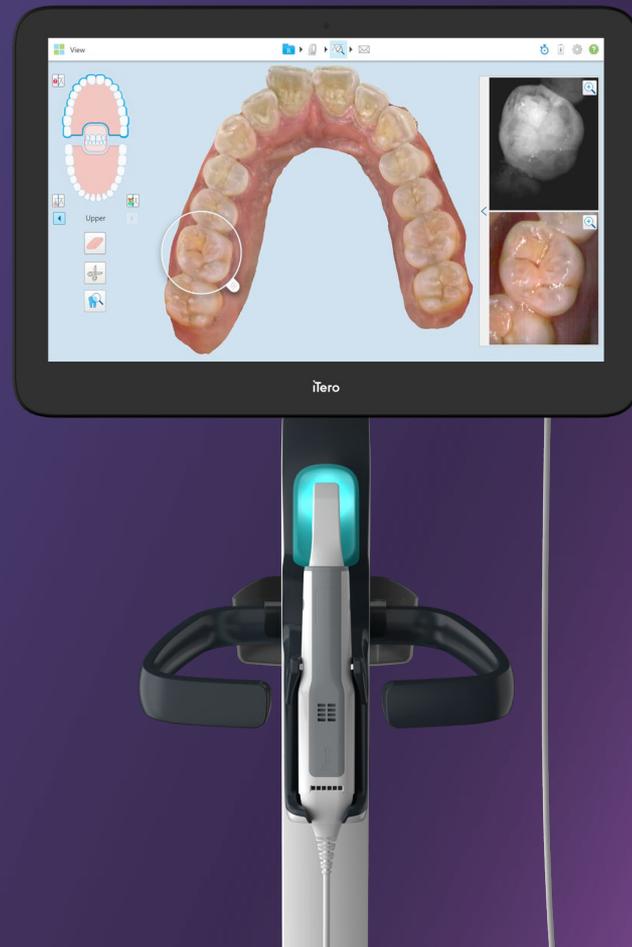
## Intraoral digital scans for Invisalign® case submission



**67M+**  
Orthodontic  
Scans/Year

**15M+**  
Resto  
Scans/Year

**15K+**  
Labs



Invisalign® scans include but not limited to additional aligner order scans, progress tracking, and does not reflect total Invisalign case shipments. Data on file at Align Technology. The iTero Element™ 2 and the iTero Element™ Flex intraoral scanners are currently available in the U.S., Canada, China, and majority of EMEA and APAC markets. The iTero Element™ 5D imaging system is available in the U.S., Canada, China, and the majority of EMEA and select APAC and LATAM markets.

# GP Dentist practice transformation...It starts **with iTero™**

Differentiated value through ortho-restorative and oral health innovations.

Best-in-class integration with exocad software and Invisalign Smile Architect™.

Make tooth movement the standard of care in dentistry.



*iTero scanners continue to deliver the **best Invisalign experience** and will drive **Invisalign growth** and penetration into GP*

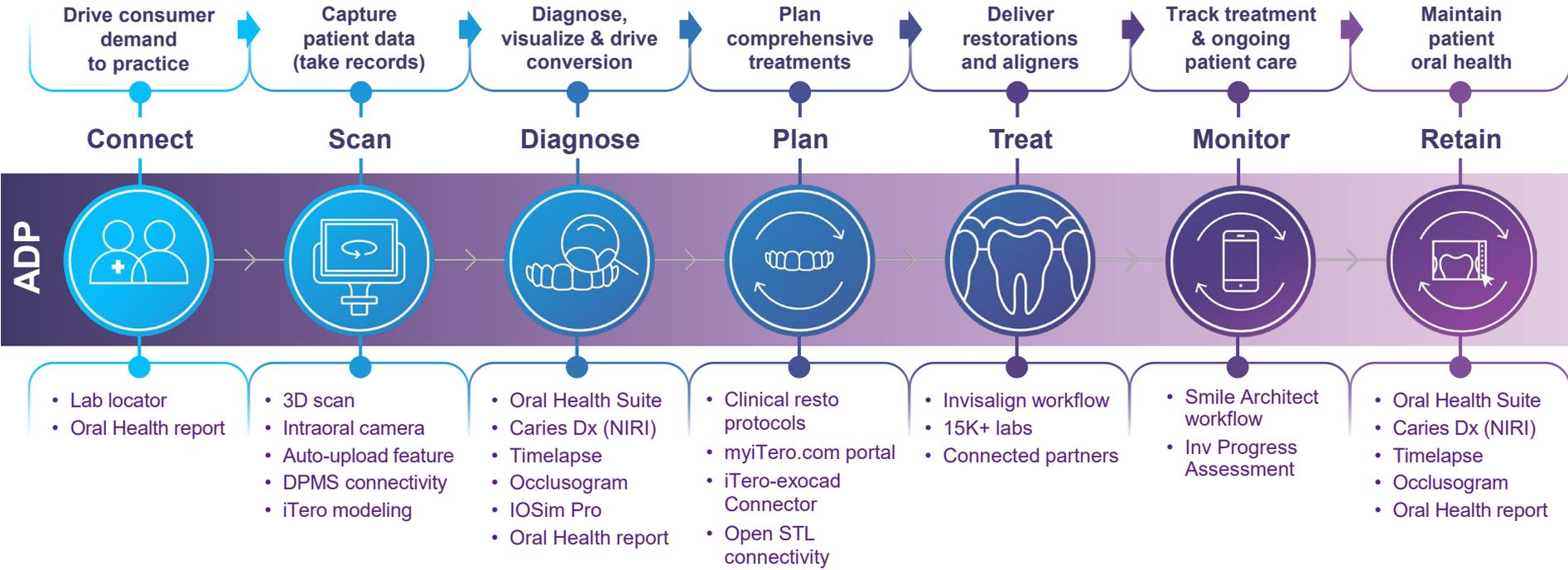
*Lead with iTero scanners in the clinic to drive **better patient communications** and **treatment options***



*iTero™ scanners play a pivotal role in the Align Digital Workflow throughout the entire customer journey and help deliver **excellent clinical outcomes, practice growth, and superb patient experience.***

Enable better clinical outcomes by making tooth movement a standard in dental procedures

# Improving Customer Experience across the Align Digital Workflow with iTero™



# Recent **iTero™ INNOVATIONS** Invisalign® Outcome Simulator Pro



Invisalign® Outcome Simulator Pro **in-face visualization**

**2X**

**more acceptance**  
than 3D model only\*

*Data on File at Align Technology*

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align™ | invisalign® | iTero | exocad

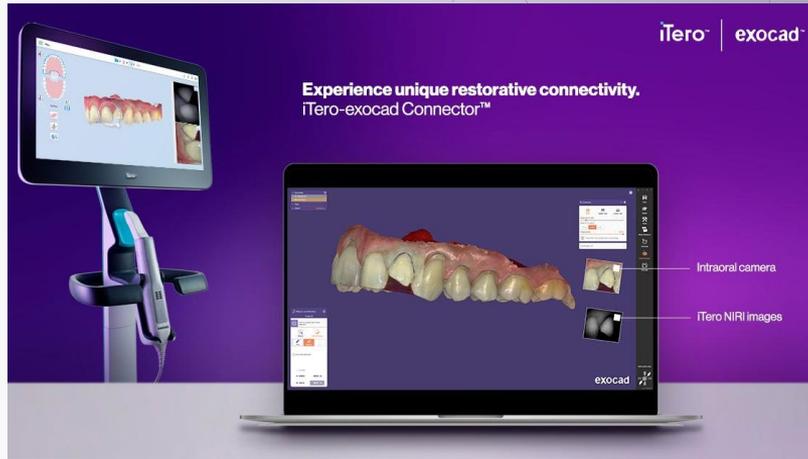
# Introducing Invisalign® Outcome Simulator Pro

Taking patients from  
wow to yes in minutes



# Recent **iTero™ INNOVATIONS**

## iTero-exocad Connector™ with NIRI + intraoral camera



“Fantastic new feature from iTero and exocad. We are already using this at the DSD lab and our customers scanning with iTero are already benefitting from it. We can better interpret the case, decide on the structure of restorations and communicate about the treatment plan.”

*Dr. Christian Coachman  
DDS CDT founder and CEO of DSD-Digital,  
Smile Design, Brazil*



“You’ll find the intraoral camera images are sharp and this allows us to choose margins much better and how that integrates with exocad is just fantastic. iTero NIRI images allow us to estimate levels of translucency. This is the kind of innovation that makes our jobs easier, better and more reliable.”

*Ashley Byrne  
CDT, Owner of Byrnes Dental Laboratory, UK*

# Recent iTero™ INNOVATIONS

## Oral Health Suite



# INNOVATION continues to drive growth and adoption

Bring more value to doctors through iTero™ technology advancements



Drive **Invisalign®** treatment adoption & growth



Continued innovation simpler, **faster scanning**



Strengthen **restorative dentistry** with exocad™ software



Lead with **oral health & Dx**

align™ | \* invisalign® | iTero® | exocad®

# Invisalign Clinical Evidence

**Dr. Mitra Derakhshan**

SVP, Global Clinical

# What Doctors Expect

## Exceptional Treatment Outcomes



### **BARRIERS**

- Clinical confidence in outcomes
- Complex cases

## Practice Efficiency and Growth



### **BARRIERS**

- Digital workflows
- Profitability – lab fees

# What Patients Want

## Elevated Patient Experience



### **BARRIERS**

- Instant visualization
- Digital communication
- Time

# What Doctors Expect

# What Patients Want

**Published Results – including complex cases and across the clinical spectrum, teenagers**

## Exceptional Treatment Outcomes\*

Harris K, et al. *Prog Orthod*. 2020 Aug 24;21(1):23.  
Effective in controlling the vertical dimension in open bite patients.

Gaffuri et al; *JCO* May 2020. LIV, 294-301  
Comparable outcomes in terms of skeletal, dental, and facial variables, achieved in both groups for extraction treatment.

Koji F et al; *AJODO* Apr 2022  
Shen GB et al; *Angle Orthod* Jan 2019

No statistical differences found in the magnitude of overbite correction.

Caruso S et al. *Eur J Paediatr Dent*. 2021

Both Twin Blocks and Invisalign MA were effective in correcting skeletal Class II.

**Invisalign MA offered better control of upper incisor torque**

Lione R et al. *Epub* Sept 2021

Invisalign First™ effective in growing patients who require maxillary arch development.

## Practice Efficiency and Growth\*

Borda AF, *Angle Orthod*. Jul 2020

Fewer appointments, fewer emergency visits, shorter overall treatment time.

\*Buschang et al; *Angle Orthod* May 2014  
\*Borda et al; *Angle Orthod* July 2020

30% fewer visits compared to braces.

Gu, J et al. *AJODO* February 2017;  
Buschang, P et al. *Angle Orthod*, May 2014  
5 months faster compared to braces.

## Elevated Patient Experience\*

Levrini L, et al. *Eur J Dent* 2015.  
Azaripour A, et al. *BMC Oral Health* 2015  
Karkhanechi M, et al. *Angle Orthod* 2013

Better periodontal health.  
Better oral hygiene and health.

Kevin Miller et al. *AJODO* March 2007  
Less pain.

Abbate GM, et al. *J Orofac Orthop* 2015

Teenagers: better compliance and oral hygiene, less plaque and gingival inflammation.

Levrini L et al. *Eur J Paediatr Dent*. Jun 2021

**Advantages with Invisalign First™:**  
comfort and aesthetics, fewer appointments and better oral hygiene compared to fixed appliances.

# Align Digital Workflow

Dedicated tools and capabilities for each stage of the treatment journey



Connect



Scan



Diagnose



Plan



Treat



Monitor



Retain

iTero Element™ 5D imaging system  
with iTero NIRI technology

**66%**

more sensitive than bite-wing X-ray\*

**85%**

OF SURVEYED  
ORTHODONTISTS AGREE

adopting **Align Digital Platform** has  
made a huge difference in their practice –  
it provided ways to improve their  
efficiency and productivity.\*

ClinCheck® Live Update  
for 3D controls  
CASES APPROVED

**82%** FASTER\*

vivera™ retainers

**30%** STRONGER  
and **TWICE** as DURABLE\*\*

Invisalign® Outcome Simulator Pro  
in-face visualization

**2X** more acceptance  
than 3D model only\*

our clinical **DATABASE**



our **AI CAPABILITIES\***

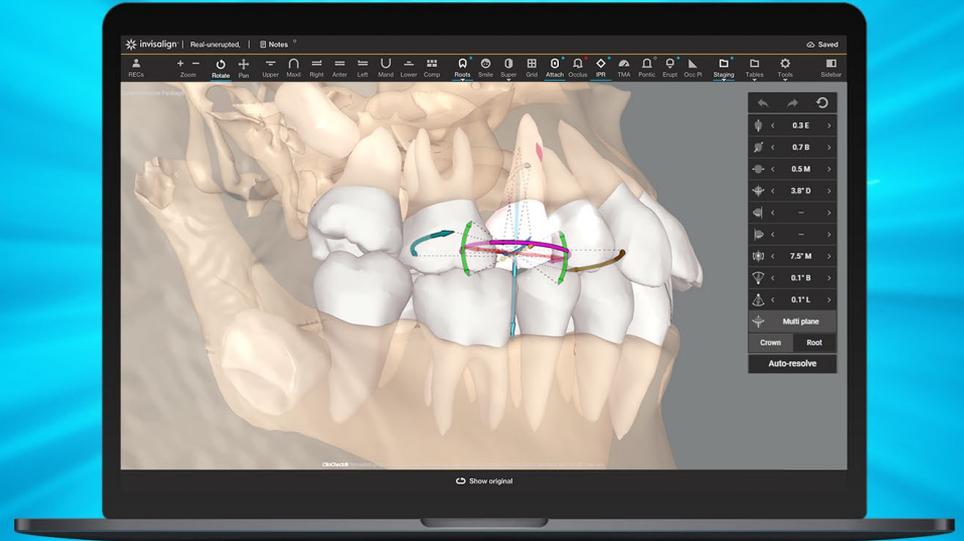
vivera™ retainers

**WITHSTAND  
TEETH GRINDING**  
without compromising effectiveness\*

\* Data on file at Align Technology.

\*\* such as Essix Plus, Essix Ace, Essix C+, Invisacryl A

Moving teeth and  
roots through bone  
is a complex  
medical procedure



# The Invisalign® System is the most advanced clinically proven system\*

## SmartTrack® material

What Invisalign clear aligners are made of

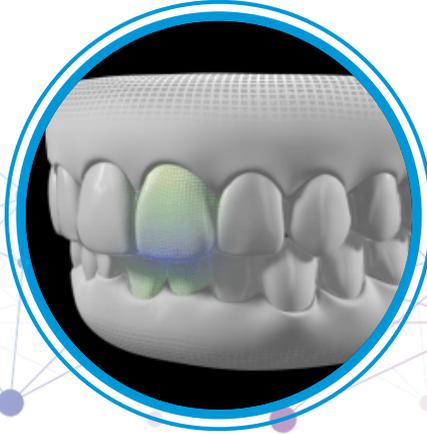


A SmartTrack aligner trimmed based on each patient's gum line provides an optimized biomechanical force system.

ZenduraFLX is 25% lower in stiffness\* applying a lower signal for tooth movement than SmartTrack material. ZenduraFLX is 2x less durable than SmartTrack material.

## SmartForce® features

How Invisalign clear aligners precisely control movement



Invisalign G6 solution for first premolar extraction with maximum anchorage is clinically proven to improve tip control and reduce unwanted incisor retroclination.

Precision bite ramps, clinically proven to improve lower incisor intrusion by up to 30%\*.

## SmartStage® technology

How Invisalign clear aligners stage movement



Sequential or modified sequential distalization has clinical advantages (less AA orders, better predictability) over simultaneous distalization.\*\*

Align staging patterns for G5 and G6 have improved efficacy than custom with less unused aligners and AAs.

\* Data on file at Align Technology, June 30, 2016.

\*\* Data on file at Align Technology, July 16, 2019.

# TEENAGERS: largest market opportunity for clear aligners

## Mandibular Advancement



Courtesy of Dr. T Kapoor, Align Global Gallery 1739

Invisalign treatment with mandibular advancement is clinically proven\* to correct Class II malocclusion.

During pubertal growth spurt, the MA promotes a significant additional growth of the mandible and produces skeletal effects with an annual change rate of 5.8 mm

Short term dentoskeletal effects of mandibular advancement clear aligners in Class II growing patients. A prospective controlled study according to STROBE guidelines. S. Ravera, T. Castrolino, F. Galati, G. Cugliari, F. Garino, A. Deregiibus, V. Quinz European Journal Of Paediatric Dentistry VOL: 22/2-2021,pg 119-124

## invisalign first™



Courtesy of Dr. Y Han Align Global Gallery 1475

Invisalign First aligners can achieve satisfactory arch expansion (3mm) changing the initial arch form without any auxiliaries.

Main advantages of this treatment lie in its comfort and aesthetics, in the reduction of the risk of additional appointments and in the better oral hygiene compared to fixed appliances.

Upper arch dimensional changes with clear aligners in the early mixed dentition : A prospective study. Lione R, Cretella Lombardo E, Paoloni V, Meulli S, Pavoni C, Cozza P J Orofac Orthop. 2023 Jan;84(1):33-40. English. doi: 10.1007/s00056-021-00332-2. Epub 2021 Sep 3. PMID: 34477905.

## Palatal Expander



IPE EFS: 6.7 mm (mean)

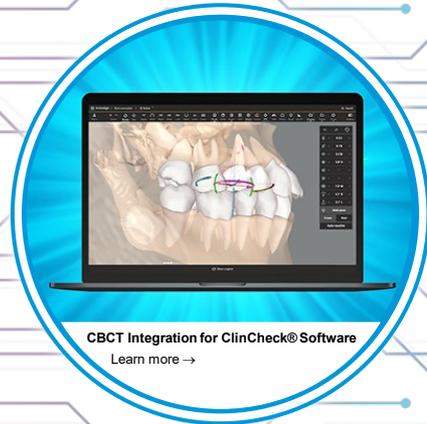
\*EFS preliminary data (n=27), subject to change with sample size analysis increases

5.4 mm (mean) w/ Hyrax Sari, et al. Angle (2003):  
5.5 mm (mean) w/ Hyrax; Sandikçioğlu, et al. AJO (1997):

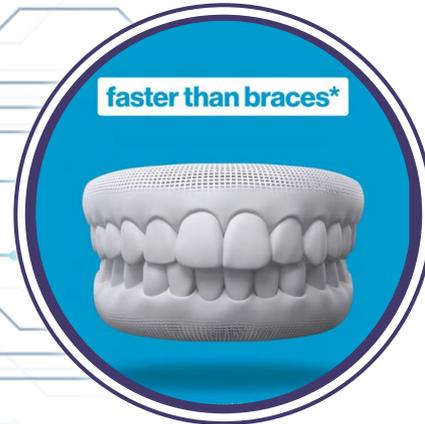
The Invisalign® Palatal Expander System is currently available on a limited basis in Canada (excluding Quebec) and will be scaled in phases globally pending regulatory approval starting in 2024. The Invisalign Palatal Expander System is pending 510(k) clearance and is not yet available in the United States.

# Clinical Evidence in Action

## Education



## Advertising



## Digital Practice



## Investments driving utilization and adoption

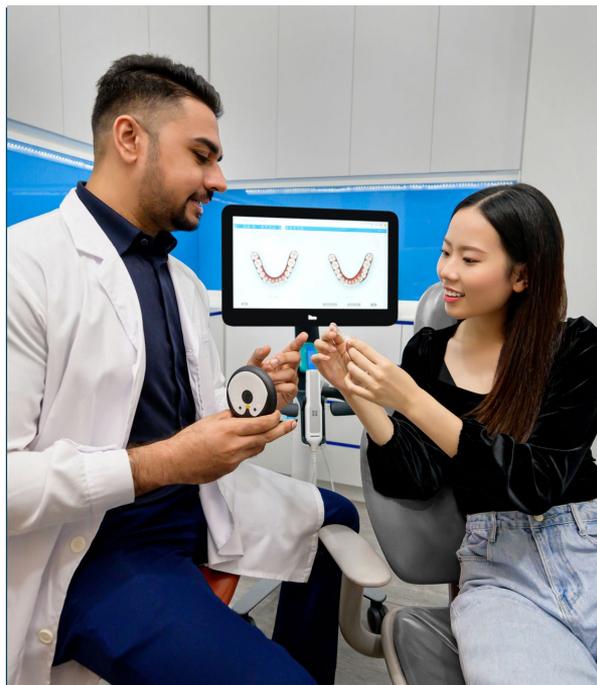
Faster than braces: Gu J, Tang JS, Skulski B, Fields HW Jr, Beck FM, Firestone AR, Kim DG, Deguchi T. Evaluation of Invisalign treatment effectiveness and efficiency compared with conventional fixed appliances using the Peer Assessment Rating Index. Am J Orthod Dentofacial Orthop. 2017 Feb;151(2):259-266. Buschang PH, Shaw SG, Ross M, Crosby D, Campbell PM. Comparative time efficiency of aligner therapy and conventional edgewise braces. Angle Orthod. 2014 May;84(3):391-6. Less painful than braces: Survey data on file at Align 12.28.22.

# Align differentiation through CLINICAL EVIDENCE addresses the market opportunity

## VERSUS BRACES

- Comparable or superior outcomes
  - Improved quality of life
    - Less pain
    - More comfort
    - Less discomfort
    - Less root resorption
    - Less carious lesions
  - Better periodontal health
  - Better oral hygiene and health
  - Fewer Emergency Visits
  - 5 months shorter Tx time
    - 30% fewer visits

align™



## VERSUS OTHER ALIGNERS/SCANNERS

- Biomechanics – G series
- Features – SmartForce™ features, Precision Bite Ramps
- Products – Invisalign® with Mandibular Advancement, Invisalign First™, Vivera™ retainers
- Digital Tools – iTero® NIRI technology, Invisalign® Outcome Simulator Pro
- Materials – SmartTrack™ material
- Staging Patterns – SmartStage™ technology

# Clinical claims cited and articles

Invisalign treatment with mandibular advancement is clinically proven\* to correct Class II malocclusion.

\*Data on file at Align Technology as of June 29, 2018, based on n=40 from a multicenter NIA IDE clinical study.

MA applied during the pubertal growth spurt, the appliance promotes a significant additional growth of the mandible and treatment during the pubertal spurt produces skeletal effects with an annual rate of change of 5.8 mm.

Short term dentoskeletal effects of mandibular advancement clear aligners in Class II growing patients. A prospective controlled study according to STROBE guidelines.

S. Ravera, T. Castroflorio, F. Galati, G. Cugliari, F. Garino, A. Deregibus, V. Quinzii European Journal Of Paediatric Dentistry VOL. 22/2-2021,pg 119-124.

Class II correction was achieved by a combination of mandibular skeletal and dental changes. CBCT shows downward and forward displacement of the mandible resulting from growth of the mandibular condyle and ramus.

Three-dimensional evaluation of Invisalign Mandibular Advancement Treatment for Class II Growing Patients: Skeletal and Dental Long Axis Outcomes.

Marcela Lima Gurgel, Antonio Carlos de Oliveira Ruellas, Jonas Bianchi, James McNamara A Jr, Sandra Tai, Lorenzo Franchi, Romain Delaet-Besson, Celia Le, Candice Logan, Najla Al Turkestani, Camila Massaro, Aron Aliaga Del Castillo, Karine Evangelista Martins Arruda, Erika Benavides, Marilia Yatabe, Lucia Cevidanes AJODO Clinical Companion, January 2023.

89% of Invisalign First cases have an average of up to 6mm of dental arch expansion planned on upper permanent first molars\*.

The results of the present study showed that aligners can achieve satisfactory arch expansion also in growing patients changing the initial arch form without any auxiliaries than attachments Upper arch dimensional changes with clear aligners in the early mixed dentition: A prospective study.

Lione R, Cretella Lombardo E, Paoloni V, Meuli S, Pavoni C, Cozza P J Orofac Orthop. 2023 Jan;84(1):33-40. English. doi: 10.1007/s00056-021-00332-z. Epub 2021 Sep 3. PMID: 34477905.

Average duration of treatment was 8 months Intercanine width showed an average increase of 2.8 mm at cusp tips, first deciduous molars, an average increase of 3.28 mm at cusp tip level, second deciduous molars, an average increase of 3.72 mm and for the upper first permanent molars, the amounts of expansion achieved at cuspid level was 3.05 mm.

The main advantages of this treatment lie in its comfort and aesthetics, in the reduction of the risk of additional appointments and in the better oral hygiene compared to fixed appliances.

Maxillary expansion with clear aligners in the mixed dentition: A preliminary study with Invisalign First™ system.

Leverini L, Carganico A, Abbate L, Eur J Paediatr Dent. 2021 Jun;22(2):125-128.

IPE EFS: **6.7 mm** (mean)

\*EFS preliminary data (n=27), subject to change with sample size analysis increases

**5.4 mm** (mean) w/ Hyrax Sari, et al. Angle (2003)

**5.5 mm** (mean) w/ Hyrax; Sandikçioglu, et al. AJO (1997)

Fewer appointments, fewer emergency visits, z shorter overall treatment time

\*Borda AF, Garfinkle JS, Covell DA, Wang M, Doyle L, Sedgley CM. Outcome assessment of orthodontic clear aligner vs fixed appliance treatment in a teenage population with mild malocclusions. Angle Orthod. 2020 Jul 1;90(4):485-490. doi: 10.2319/122919-844.1. PMID: 33378505; PMCID: PMC8028462.

30% fewer visits compared to braces

\*Buschang PH, Shaw SG, Ross M, Crosby D, Campbell PM. Comparative time efficiency of aligner therapy and conventional edgewise braces. Angle Orthodontist, Vol 84, No 3, 2014 \*Borda AF, Garfinkle JS, Covell DA, Wang M, Doyle L, Sedgley CM. Outcome assessment of orthodontic clear aligner vs fixed appliance treatment in a teenage population with mild malocclusions. Angle Orthod. 2020 Jul 1;90(4):485-490. doi: 10.2319/122919-844.1. PMID: 33378505; PMCID: PMC8028462.

In a retrospective study to compare the time efficiency of aligner therapy and conventional braces, 300 patients were evaluated (150 with aligners and 150 with braces). All of the patients had mild-to-moderate Class I malocclusions and were treated with no extraction. It was concluded that conventional braces patients required significantly more visits, a longer treatment duration, more emergency visits, greater emergency chair time, and greater total chair time than aligner therapy. \*Invisalign® patients require on average 30% fewer doctor visits than fixed appliance patients. Invisalign® treatment duration was 5 months/5.5 months shorter than conventional braces treatment.

Buschang PH, Shaw SG, Ross M, Crosby D, Campbell PM. Comparative time efficiency of aligner therapy and conventional edgewise braces. Angle Orthod. 2014 May;84(3):391-6. doi: 10.2319/062113-466. PMID: 24749702; PMCID: PMC8667515.

Less pain Kevin Miller et al. AJODO March 2007  
More comfortable White D et al.\*, Angle Orthod Nov 2017  
Better Periodontal Health  
Better Oral Hygiene and Health

The aim of this prospective study was to compare the periodontal health and the microbiological changes via real-time polymerase chain reaction (PCR) in adult patients treated with fixed orthodontic appliances and Invisalign® system. Concluded patients undergoing orthodontic treatment with the Invisalign System show a superior periodontal health in the short-term when compared to patients in treatment with fixed orthodontic appliances. Invisalign should be considered as a first treatment option in patients with risk of developing periodontal disease. Leverini L, Mangano A, Montanari P, Margherini S, Caprioglio A, Abbate GM. Periodontal health status in patients treated with the Invisalign® system and fixed orthodontic appliances: A 3 months clinical and microbiological evaluation. Eur J Dent. 2015 Jul-Sep;9(3):404-410. doi: 10.4103/1305-7456.163218. PMID: 26430371; PMCID: PMC4569994.

Azaripour A, et al. BMC Oral Health 2015  
Karkhanehi M, et al.. Angle Orthod 2013

Less root resorption:

Yi J, et al. J Dent Sci. 2018 Mar;13(1):48-53

Li Y, et al. Prog Orthod. 2020 Jan 6;21(1):1.

More comfortable.

White D et al.\*, Angle Orthod Nov 2017

Based on a subset of 59 cases where iTero Element 5D imaging system was compared against the clinical evaluation of posterior proximal carious lesions above the gingiva as observed during caries debritement, reported as part of a multisite clinical study conducted in real world settings comparing iTero NIRI technology (Near Infra-red imaging) of the iTero Element 5D imaging system to bite-wing x-rays (BWXR) (n= 3,502 posterior proximal tooth surfaces out of 5,796 proximal surfaces in 102 patients) as a tool in aiding in detection and diagnosis.

Data on file at Align Technology, as of September 2, 2021.  
Metzger Z, Colson DG, Bown P, Weihardt T, Baresil N, Nolting T. Reflected near-infrared light versus bite-wing radiography for the detection of proximal caries: A multicenter prospective clinical study conducted in private practices. J Dent. 2021 Oct 24;103861.

GP patients who received Invisalign® Outcome Simulator Pro in-face visualization accepted Invisalign® treatment at twice the rate of patients who only received the 3D model.\*

\*Based on over 115,000 Invisalign Outcome Simulator Pro simulations globally. Invisalign Outcome Simulator Pro is only available on the iTero Element Plus Series. Data on File at Align Technology, as of June 20, 2023.

85% of surveyed orthodontists agree adopting Align Digital Platform\*\* has made a huge difference in their practice – it provided ways to improve their efficiency and productivity.\*

Data on file at Align Technology, as of July 20, 2021.

(\*\* have used at least one digital Align solution over the past 12 months in their workflow: My Invisalign App, Invisalign SmileView, Invisalign Virtual Appointment, iTero and/or Invisalign Outcome Simulator, Invisalign Photo Uploader, ClinCheck Pro 6.0 and/or ClinCheck In-Face Visualization tool, or Invisalign Virtual Care).

A retrospective case-control study was to compare the treatment effectiveness and efficiency of the Invisalign system with conventional fixed appliances in treating orthodontic patients with mild to moderate malocclusion in a graduate orthodontic clinic. Data showed that both Invisalign and fixed appliances were able to improve the malocclusion. Invisalign patients finished treatment faster than did those with fixed appliances.

Gu J, Tang JS, Skulski B, Fields HW Jr, Beck FM, Firestone AR, Kim DG, Deguchi T. Evaluation of Invisalign treatment effectiveness and efficiency compared with conventional fixed appliances using the Peer Assessment Rating index. Am J Orthod Dentofacial Orthop. 2017 Feb;151(2):259-266. doi: 10.1016/j.ajodo.2016.06.041.

In the hands of an experienced doctor, Invisalign clear aligners can shape your teen's smile with less pain than braces

In a pain score of 1-9, 1 being extremely painful and 9 not at all painful, Invisalign teenager patients (age 13-18 n=106) rated pain score of 6.5 vs traditional metal braces teenager patients (age 13-18 n=141) rated pain score of 5.1. Data on file at Align Technology, as of December 28, 2022.

Teenagers treated with removable appliances display better compliance with oral hygiene, less plaque, and fewer gingival inflammatory reactions than their peers with fixed appliances. Abbate GM, Caria MP, Montanari P, Mannu C, Orrù G, Caprioglio A, Leverini L. Periodontal health in teenagers treated with removable aligners and fixed orthodontic appliances. J Orofac Orthop. 2015 May;76(3):240-50. doi: 10.1007/s00056-015-0285-5. PMID: 25929710.

# Americas and EMEA

**Simon Beard**

EVP and MD, Americas, EMEA

# Capturing Our Huge Opportunity

**AMS**

US, Canada,  
Latin America

**EMEA**

Europe, Middle  
East, Africa

**US**

**Canada**

**Latin America**

**Europe**

**EEMA**

**Similar market characteristics, customer and consumer demographics**

- Drive faster adoption of new technology and new business models
- Leverage strategic sales and marketing programs that drive value and differentiation
- Streamline and accelerate local decision making across the countries and clusters
- Effective, efficient, and creative commercial organization that drives high growth

# ENORMOUS OPPORTUNITY

9M teens

14M  
Annual ortho starts

5M adults

400M  
Consumer  
Opportunity

# THE AMERICAS

# EMEA

**57K** Active Doctors

**27** NA Utilization\*

**17%** Revenue CAGR

**32K** Active Doctors

**21** Utilization\*

**26%** Revenue CAGR

AMERICAS & EMEA

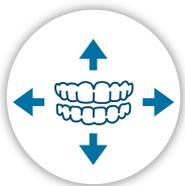
**3.5K**

**Customer focus: sales, service, clinical education**

Active doctors = 1 case in prior 12 months as of Q2'23  
Annualized Utilization rolling 12 months ended Q223  
5-year Revenue CAGR (2017 - 2022)

align™ | \* invisalign® | iTero® | exocad®

# Focus on **BUSINESS INNOVATION** and **TECHNOLOGY ADOPTION**



**ORTHO**  
ENGAGEMENT



**RESTORATIVE**  
DENTISTRY



**iTero**  
SCANNING



**DSOs**



**EXPANSION**  
MARKETS



# Orthodontist **ENGAGEMENT**



**RAISING CONSUMER AWARENESS**  
and driving treatment

**GAINING TRACTION**  
with teens and growing children

**SCALING NEW SUBSCRIPTION MODELS**  
for Invisalign<sup>®</sup> treatment and Vivera<sup>™</sup> retainers

Orthodontist  
**ENGAGEMENT**

# TEEN TOOLKIT

**Value Proposition:** Accelerate adoption | Reduce financial barriers | Increase conversion

**Program Period:** April 21 – December 31



## Financing Plan

Assists with initial **cash flow** with **flexible payment** terms



## Teen Guarantee +

Removes perceived teen **compliance** risk for doctor and parent



## Treatment Planning Mentorship

**Support** when doctors need it



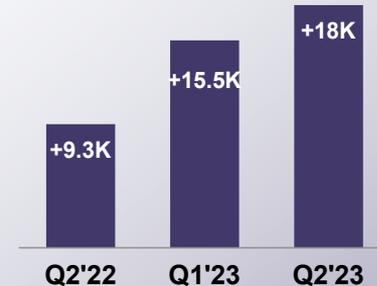
## Invisalign Academy

**Staff education** and in-practice **support** tools

# DSP SUBSCRIPTION: Speed, Scale, Simplicity

- Simple Touch-up cases (3 – 10 stage aligners) and Retention
- Monthly subscription program at a fixed-price, based on doctors' monthly needs for Retention or "Touch-up" cases
- DSP has been successful in addressing an important and growing opportunity for experienced Invisalign doctors
- DSP launched in the U.S. and Canada in 2021, Spain and the Nordic countries in Q2'23 and France and in the UK in 2H'23
- We have also extended DSP to DSO partners who recognize the value of our Invisalign® subscription aligner model
- Gross margin accretive

## DSP Touch-up Cases North America\*



\*As of Q2 2023.



Unlocking the potential  
of the **GP CHANNEL**



Technology enabling **NEW COMPREHENSIVE WORKFLOWS** and **TREATMENT APPROACHES**

Focus on **iTero™ SCANNER ACCESS**

Peer to Peer **EDUCATION** and **GROWTH PROGRAMS**

Unlocking the potential  
of the **GP CHANNEL**



It starts with iTero™

A woman and a man in a white lab coat are looking at a tablet. The tablet displays a software interface for dental simulation, showing two sets of teeth. The background is a clinical setting with a microscope and other dental equipment.

Portfolio **INNOVATION**

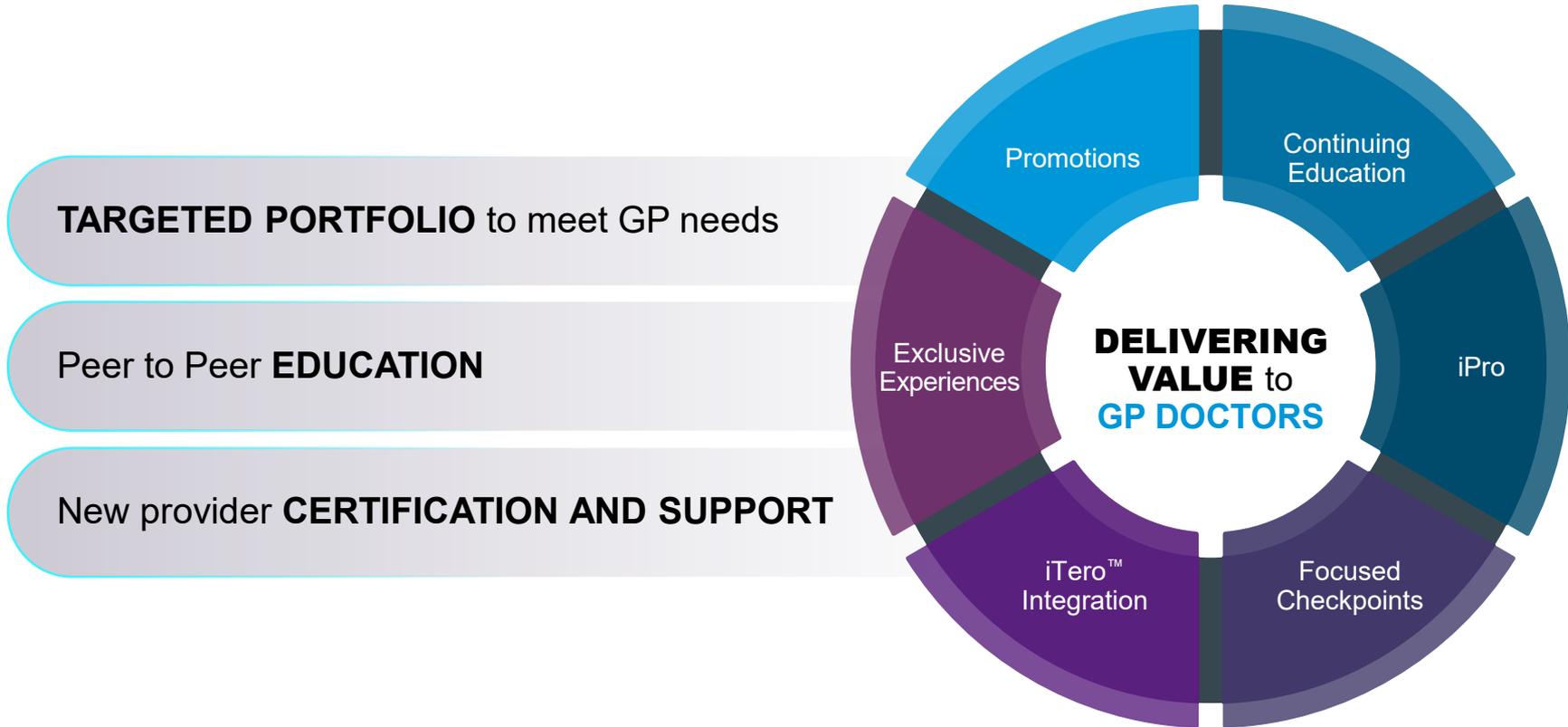
Driving **TECHNOLOGY UPGRADES**

Targeting lapsed and **NON-INVISALIGN DOCTORS**

Harness **POWER AND INFLUENCE OF LABS**

It starts with **iTero™**

# Surrounding GPs with **360-DEGREE SUPPORT**





# Dental Service Organization **GROWTH AND EXPANSION**

# Proliferation of **DENTAL SERVICE ORGANIZATION**

## DSO MARKET

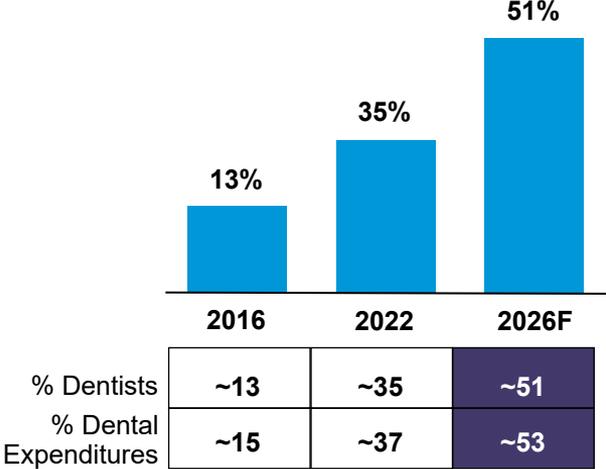
~ **20** large DSOs with **150+** dental practices

~**16%** of young dentists 21 to 34 years old are affiliating with DSOs

Dental school seniors who plan to join a DSO



## US DSO penetration



DSO-affiliated dentists typically generate more revenue

Note: DSO=dental=dental service organization  
 Source: ADA; Becker's Dental; Dental Transitions; Dentistry Today; Group Dentistry Now; U.S. Census Bureau Statistics of U.S. Business; William Blair; L.E.K. research and analysis



Continued **MARKET CONSOLIDATION**

Dedicated **PARTNERSHIP APPROACH**

Support **GROWTH** and **INNOVATION ADOPTION**

Dental Service Organization  
**GROWTH AND EXPANSION**

# Expansion **MARKET OPPORTUNITIES**



**TURKEY &  
MIDDLE EAST**

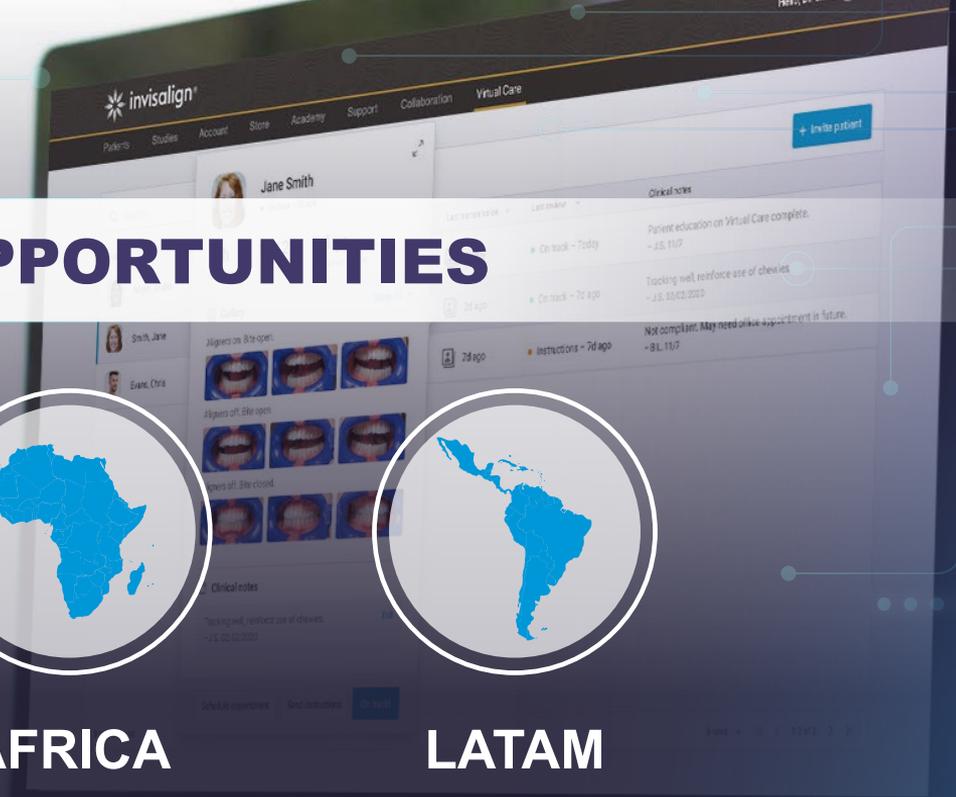


**AFRICA**



**LATAM**

Dental Service Organization  
**GROWTH AND EXPANSION**



# Americas EMEA capturing our opportunity

Adding significant value to Orthodontists with innovation

Unlocking potential of comprehensive restorative dentistry with GPs

Well positioned in DSO

Creating opportunity with new business models

# Asia Pacific

**Raj Pudipeddi**

Chief Product and Marketing Officer,  
EVP and MD, Asia Pacific

# ENORMOUS OPPORTUNITY



200M  
Consumer  
Opportunity

6M teens      8M Annual ortho starts      2M adults



## APAC

**35K** Active Doctors

**12** Utilization\*

**25%** Revenue CAGR

# 1.5K

**Customer focus: sales, service, clinical education**

Active doctors = 1 case in prior 12 months as of Q2'23  
Annualized Utilization rolling 12 months ended Q2'23  
5-year Revenue CAGR (2017 - 2022)

align™ | \* invisalign® | iTero® | exocad®

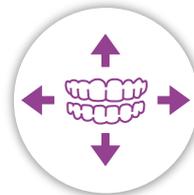
**INTERNATIONAL  
EXPANSION**



**PATIENT  
DEMAND**



**ORTHODONTIST  
UTILIZATION**



**GP DENTIST  
TREATMENT**



Relentless focus and  
execution on our  
**STRATEGIC  
GROWTH DRIVERS**

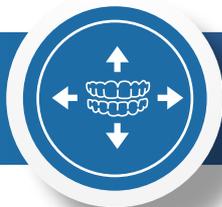
# 2023 APAC PRIORITIES

## INTERNATIONAL EXPANSION



- China: Tier 3 & 4 cities
- Japan: GP focus, more cities
- India Acceleration plan
- Win with DSOs
- University program

## ORTHO UTILIZATION



- Growth programs
- Accelerate Teen growth
- Adoption of Align Digital Platform

## GENERAL DENTIST ADOPTION



- New Doctor onboarding, Treatment planning services
- Smile Architect
- Expand Whitening and Essentials

## PATIENT DEMAND



- Increase media spend
- Focus on Superiority and Differentiation
- Expand MyInvisalign app

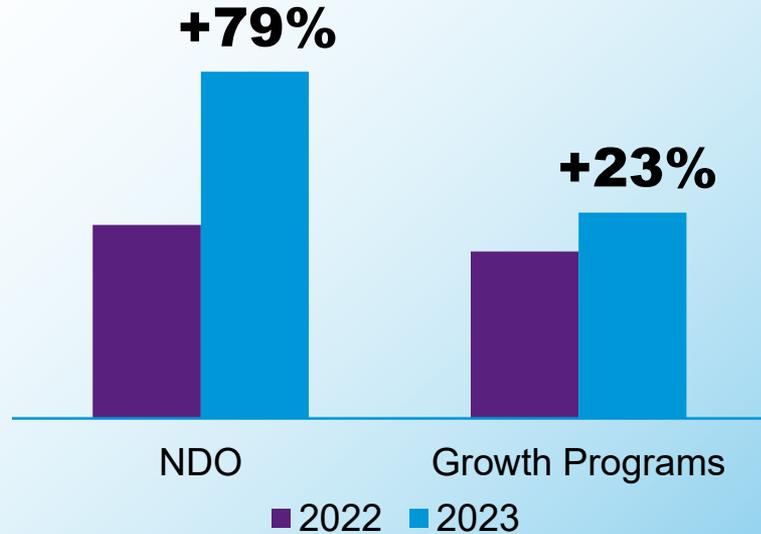
## iTero INTEGRATION



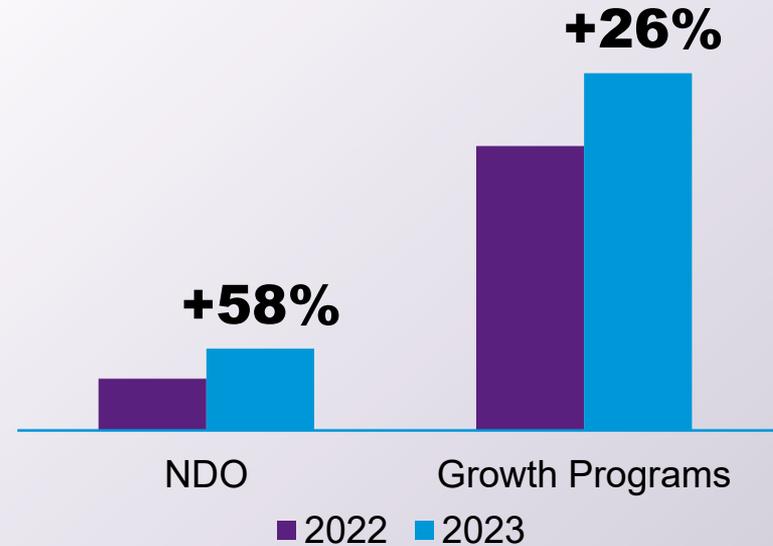
- Funnel management and improved Conversion
- Integrate "Go Digital"
- Expand CPO/ Rental/ Leasing

# NEW DOCTOR ON-BOARDING & GROWTH PROGRAMS

## DOCTORS TRAINED



## 25%+ LIFT IN CASES



# CHINA continues to be an **ATTRACTIVE, STRATEGIC OPPORTUNITY**



## CHINA EXPANSION



- Tier 3 & 4 Cities

## ORTHO UTILIZATION



- Focus on DSOs
- Portfolio to win with Private clinics
- Partner with China Ortho Society, KOLs

## GENERAL DENTIST ADOPTION



- New Doctor onboarding
- Treatment planning
- Invisalign® Smile Architect

## PATIENT DEMAND



- Teen Campaign
- Play in China Digital ecosystem

# Strong plans to drive **GROWTH IN KEY MARKETS**

## JAPAN



- Teen growth, more cities
- Brand presence
- Expand Portfolio (Comp 3in3, Moderate)
- New Doctor onboarding & Growth Programs

## ANZ



- Teen growth, Execution
- Brand strength
- Expand Portfolio, improve price competitiveness
- New Doctor onboarding & Growth Programs

## KOREA



- Teen growth
- Brand presence
- Treatment planning service
- New Doctor onboarding & Growth Programs

## INDIA



- Expand to top 10 cities, General Dentists
- Brand superiority
- Expand Portfolio (Essentials, Comp 3in3)
- New Doctor onboarding & Growth Programs

# Drive Invisalign Brand Strength and Differentiation

**#1** doctor recommended clear aligner for teens<sup>™</sup>

to find more

©2023 Invisalign, a brand of Align Technology, Inc. The Invisalign system is a doctor-recommended treatment and not a substitute for parental consent. All rights reserved. All trademarks are the property of their respective owners.

Shorts

違和感を感じにくいから。

1,500万人以上の採用率を達成

私の私のライフスタイルにとってでも

invis is continuing with your favourite food.

Remove aligner and chomp away.

Monika

- Monika Shin

invis is customized treatment.

Invisalign® clear aligners have more predictability and comfort so I have one less thing to worry about.

- Yui  
Invisalign Professional Case Collection Overlay

The smile you expect is the smile you get

Real Invisalign user

Mannat's Invisalign Model, 22, India

After lunch, I clicked my Invisalign aligners back in

My Invisalign® aligners are made just for me. They feel so comfortable.

Jansen  
Hong Kong, Student  
Dental Condition: Underbite

5 million smiles

invisalign

invisalign



# TREMENDOUS potential in APAC

**RISING** middle class  
and **INCOMES**

**GROWING**  
teens and young adults

Increasing  
**BRAND & quality**  
**CONSCIOUSNESS**

**DIGITAL ADOPTION**  
by consumers  
and doctors

# Leveraging AI for Improved CX

**Jennifer Olson**

EVP, Customer Success



**CUSTOMERS** are at the  
**CORE** of all that we do



CARE@align

# Since 2021, we have...



Launched  
**LOCAL HIVES**



Ran annual  
**CX WEEK EVENTS**

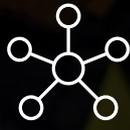


Expanded  
**CARE@align**



Transformed  
**CUSTOMER SUPPORT  
EXPERIENCE**

# Our RESULTS

1/3 

**OMNICHANNEL SUPPORT**  
options offset 1/3 of incoming call  
volume in the US

4.8\* 

**SATISFACTION RATING** respects doctor and  
staff time while enabling self-  
help support

\* Data on file at Align Technology.

Driving all time high **SATISFACTION**

**20%\***

**GLOBAL  
NET PROMOTER SCORE**  
Since last update

\* Data on file at Align Technology.



What's  
**NEXT?**





90%  
**FEEDBACK**  
from customers



**PRIORITIZE  
CUSTOMER  
REQUESTS**  
in product  
roadmap

**DATA**

enables  
personalized  
**CUSTOMER  
EXPERIENCES**



**PERSONALIZED  
SOLUTIONS**  
reactive to  
proactive

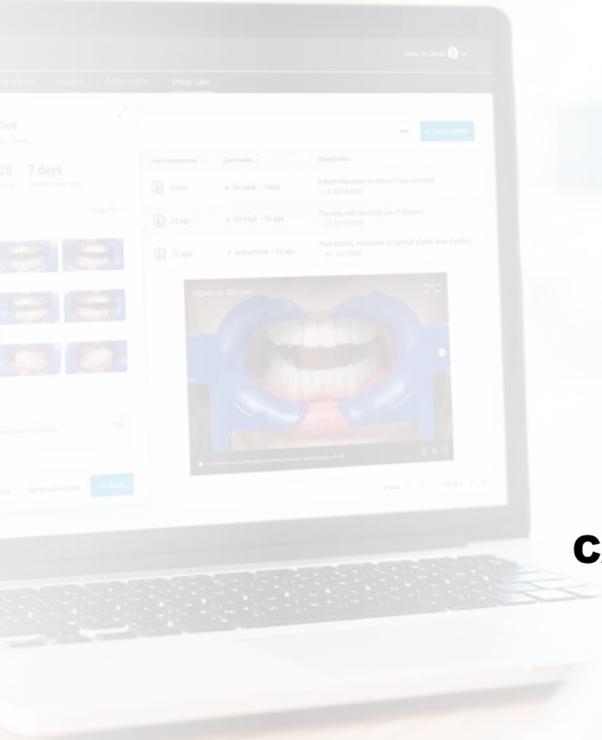


**DATA MINING**  
reveals  
customer likes  
and dislikes

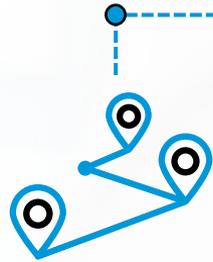


# How **AI** works in **CX**

# How **AI** works in **CX**



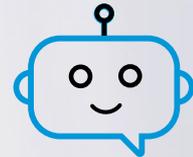
## AI CX



**CASE TRACKER**  
(WMS)



**“SURPRISE  
AND DELIGHT” CX**



**CHATBOT  
CONVERSATIONAL AI**

# Unmatched Global Scale and Efficiency

**Emory Wright**

EVP, Global Operations

# +26 YEARS

From appliance to platform

Revenue Y/Y%  
LTM 20% - 30%

2001–2023

+23%

## 1997 – 2006

Invisalign® clear aligners  
ClinCheck® software  
Attachments  
3D Printing SLA

## 2007 – 2012

Force system biomechanics  
G-Series  
Vivera™ retainers  
Teen product  
SmartForce™ features  
ClinCheck® Pro  
iTero™ intraoral scanners

## 2013 – 2016

SmartTrack™ material  
Biteramps  
Invisalign® Outcome Simulator  
SmartStage™ technology  
iTero Element™ scanner  
Mandibular advancement

## 2017 – 2023

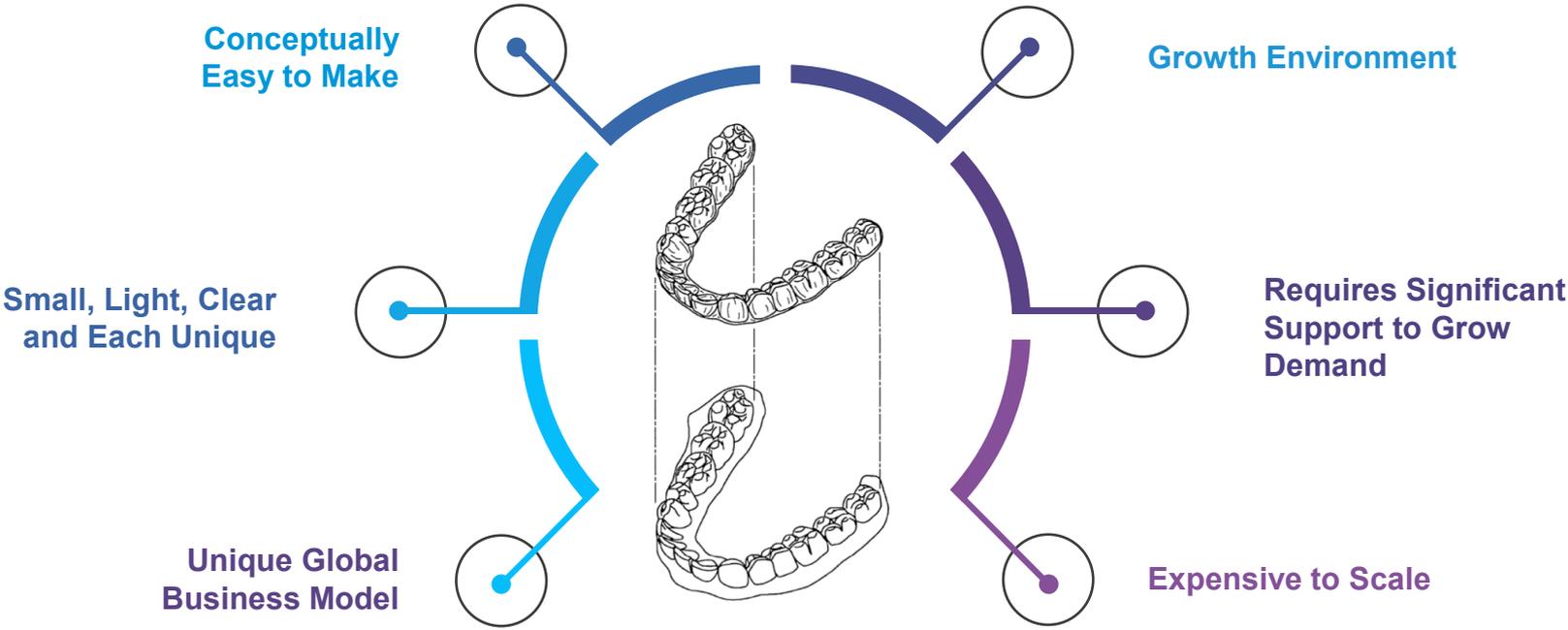
Invisalign First™  
My Invisalign™ app  
iTero Element™ 5D imaging system NIRI  
ClinCheck® Pro 6  
exocad™ lab software  
Invisalign® Virtual Care  
Professional Whitening  
Subscription  
E-Commerce  
Diagnostics  
Invisalign® Practice App  
Invisalign Smile Architect™  
Invisalign® Virtual Care AI  
Enhanced precision wings for  
Invisalign treatment with mandibular advancement

\*CAGR based on mid-point of revenue guidance for the full year 2023, as of July 26th, 2023

● Software ● New products ● Services

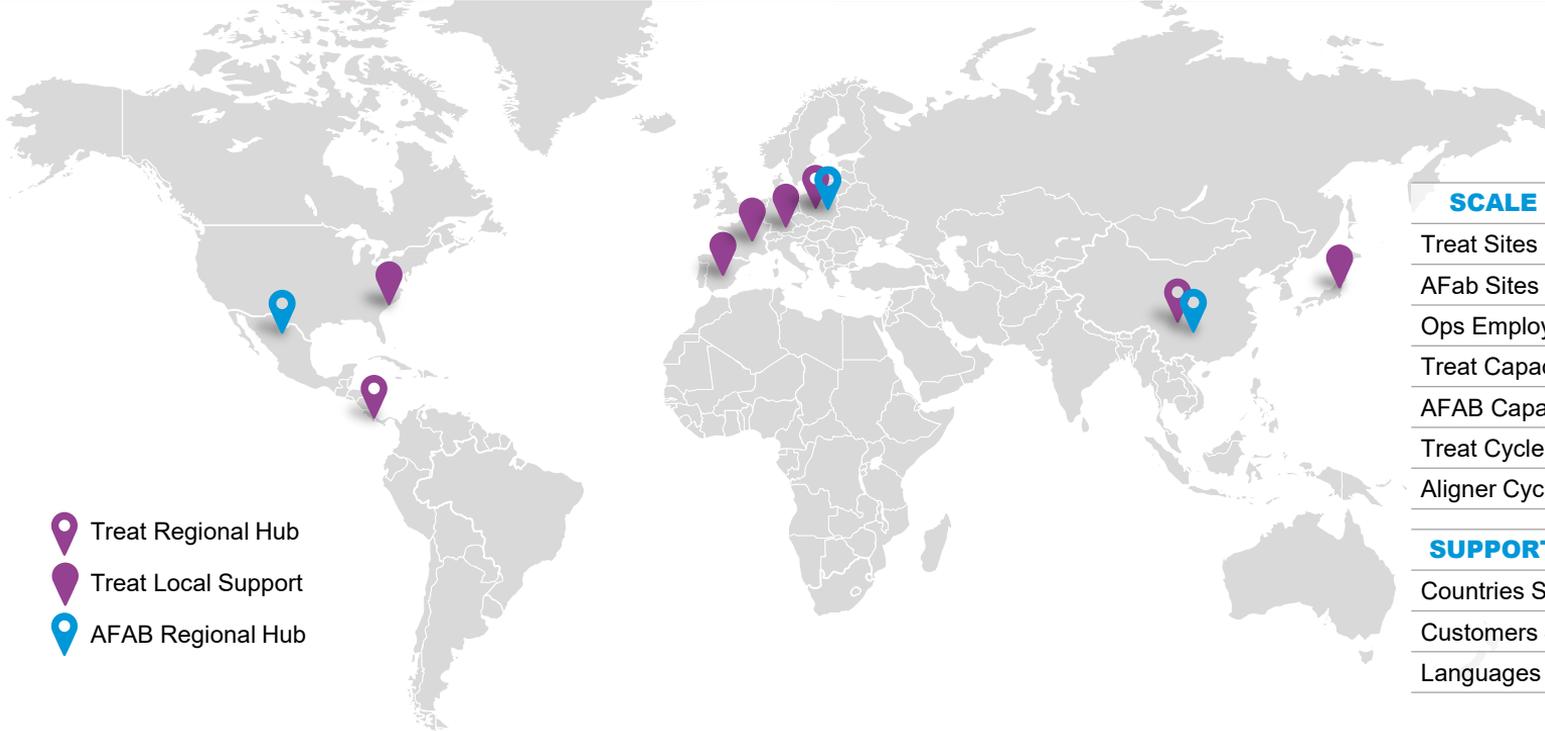
# Scaling a mass customized medical device is hard...

**..the simplicity of the device's appearance belies the complexity of its design and manufacturability**



# Optimized Footprint and Scale

Efficiently supports the global market



-  Treat Regional Hub
-  Treat Local Support
-  AFAB Regional Hub

## SCALE BY THE NUMBERS

Treat Sites	9
AFab Sites	4
Ops Employees	~12K
Treat Capacity/Day*	>59K
AFAB Capacity/Day*	>1M
Treat Cycle Time	~1-2 days
Aligner Cycle Time	~3-4 days

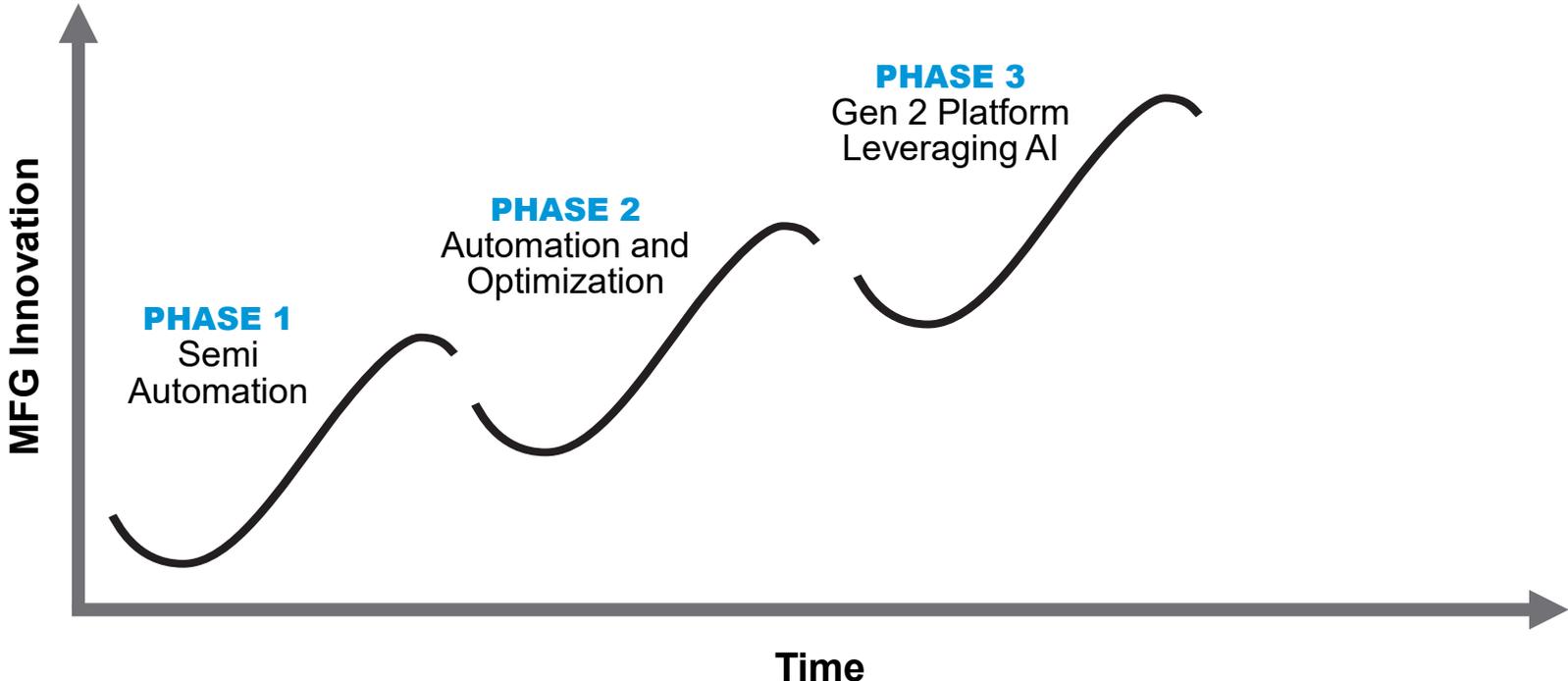
## SUPPORT BY THE NUMBERS

Countries Supported	100+
Customers Supported	247K+
Languages Supported	20+

\*Data on file at Align Technology

# Continuous Innovation Enables Growth and Scale

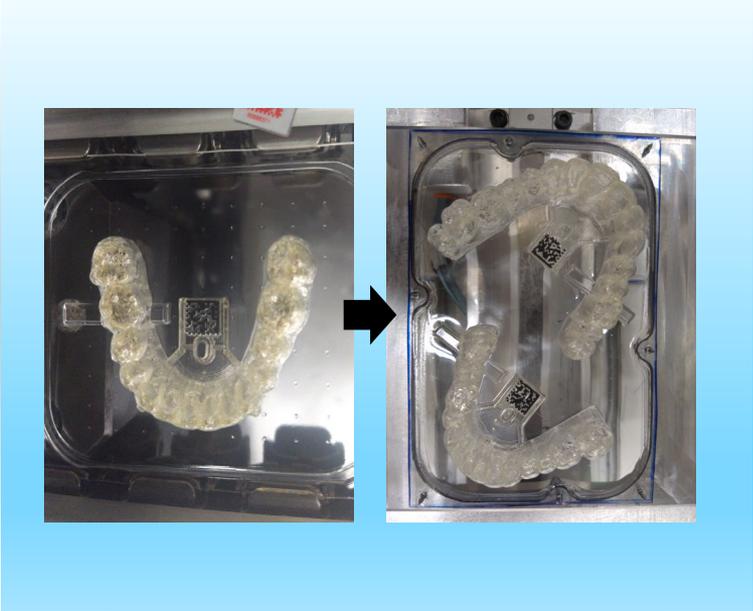
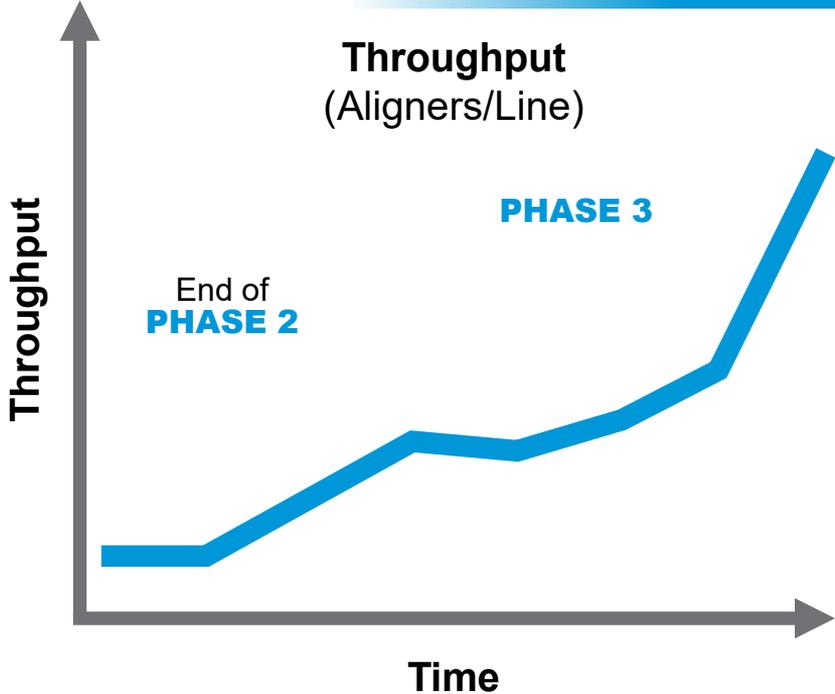
25+ years driving manufacturing technology innovation



# History of Scalability

Engineering & Software talent driving innovation

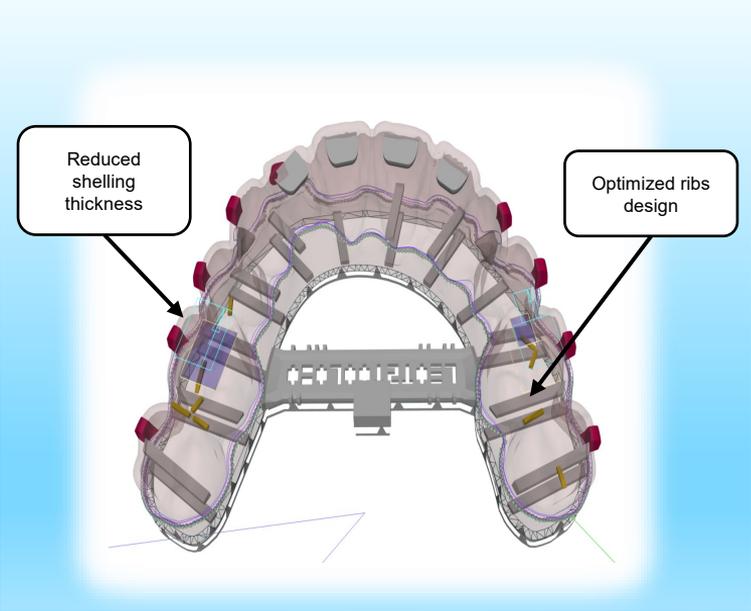
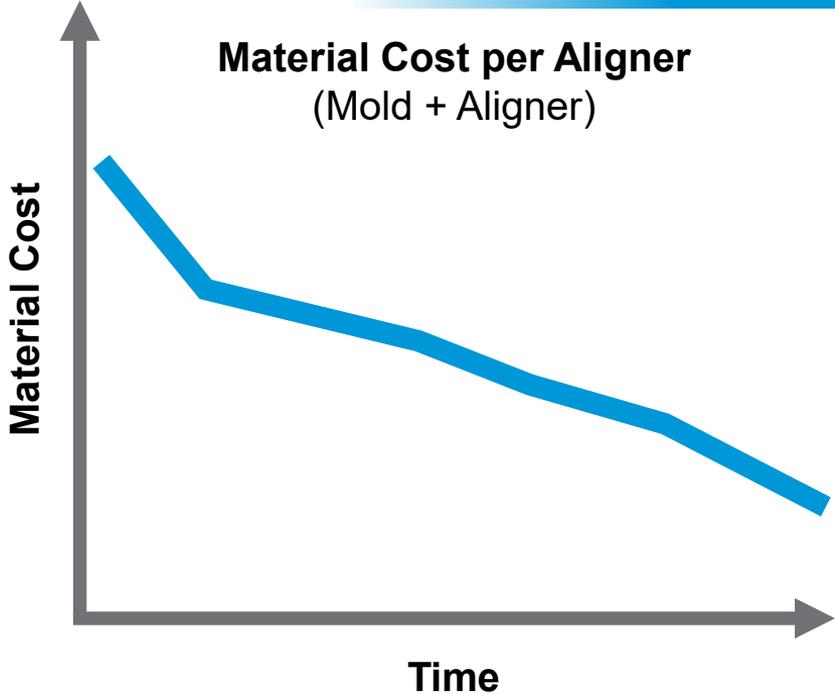
140%+ increase in throughput



# Scale Requires Efficiency/Cost per Unit Improvement

Further enabling global scale

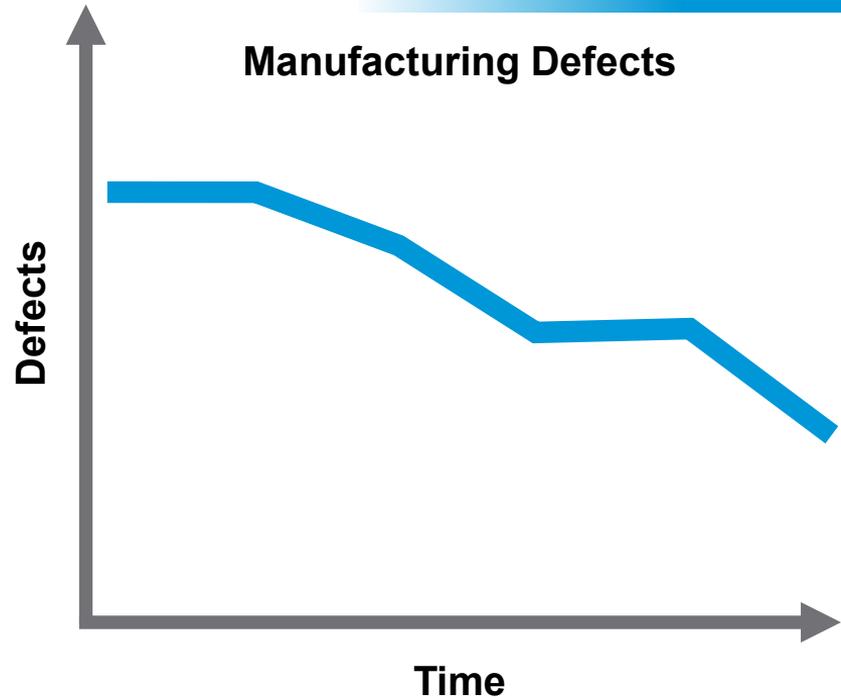
50%+ reduction in material



# Quality Improvement through Vision & AI Systems

Driving long term competitive advantage

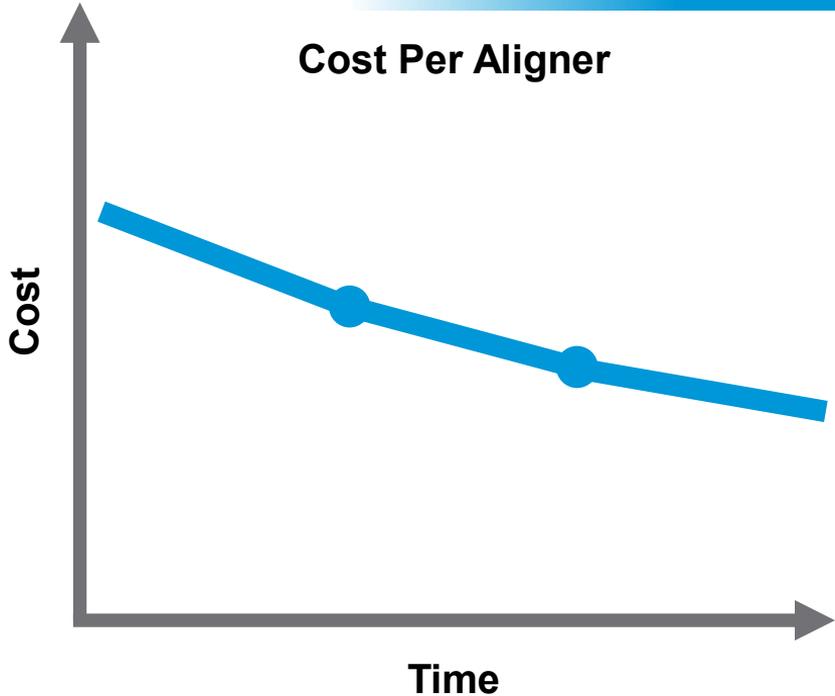
60%+ reduction in MFG defects



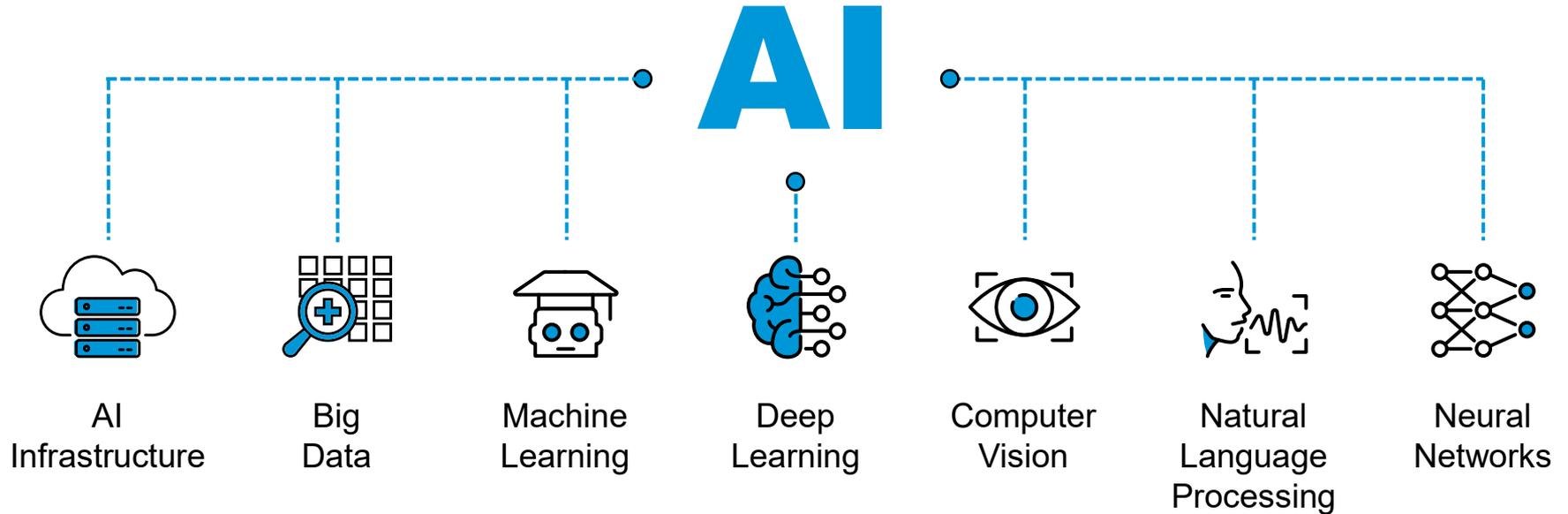
# Trended Cost Per Aligner

Enabling continued investment in innovation

50%+ reduction cost



# AI & Future of Manufacturing



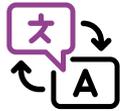
# AI & Future of Manufacturing

Unlocking the next phase in innovation for mass customization

## MASS CUSTOMIZATION



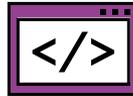
Image Based  
QC Across All  
Aspects of  
Manufacturing



Language  
Translation



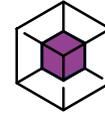
Complex  
Instruction  
Summarization



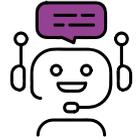
Text Conversion  
to Code



Data Integrity  
Assessment &  
Conversion



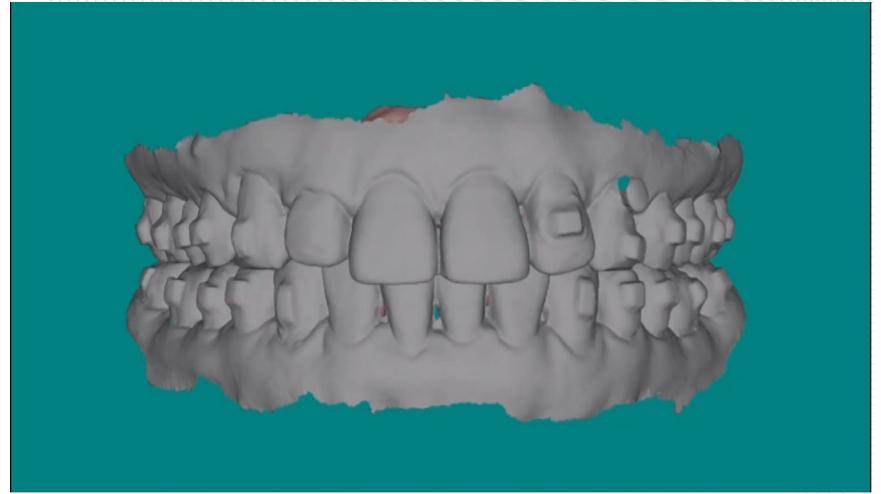
Manufacturability  
Determination



Autonomous  
Guided  
Vehicles/  
Autonomous  
Mobile Robots

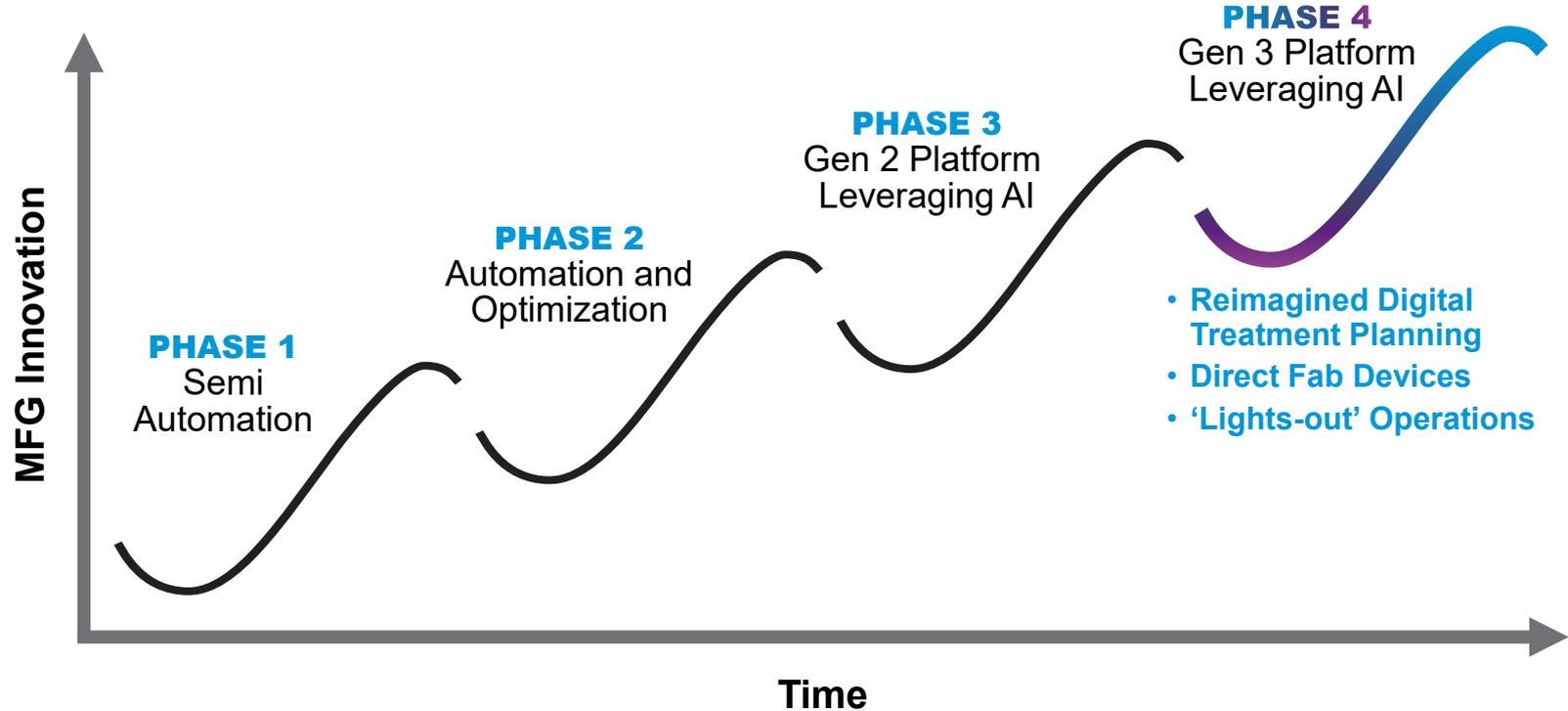
# AI & Future of Manufacturing

Unlocking the next phase in innovation for mass customization



# Future Scalability and Competitive Advantage

**Solid path to drive scalability in our next phase of MFG innovation**



align™ | ✨ invisalign® | iTero® | exocad®

# Sustainable Growth and Profitability

**John Morici**

Chief Financial Officer

# Bringing it all **TOGETHER**

Massive, untapped **OPPORTUNITY**

Innovative **TECHNOLOGY**

Competitive **ADVANTAGE**

**RELIABLE** execution

**UNIQUE** position

**SUSTAINABLE** long-term growth

# What makes Align **UNIQUE?**

We strongly **BELIEVE** in the large untapped **MARKET OPPORTUNITY**

We will **RELIABLY EXECUTE** to create our **COMPETITIVE ADVANTAGE**

Next wave of **INNOVATION** will be **TRANSFORMATIVE** and **REVOLUTIONARY**

We are **CONFIDENT** in the **LONG-TERM** model



**600M**  
POTENTIAL PATIENTS

through

**+2M**  
DOCTORS

with an  
iTero™ scanner at  
**EVERY CHAIR**



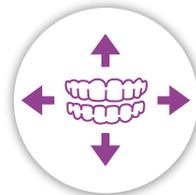
**INTERNATIONAL  
EXPANSION**



**PATIENT  
DEMAND**



**ORTHODONTIST  
UTILIZATION**



**GP DENTIST  
TREATMENT**



Focused Execution  
**STRATEGIC  
GROWTH DRIVERS**

# Our unique position and **COMPETITIVE ADVANTAGE**

multivariable equation that is very difficult to replicate

## **MANUFACTURING EXCELLENCE**

- > 1M unique clear aligner parts / day
- > 59K treatment plans / day
- Proven & Scalable Technology

## **GEOGRAPHICAL EXPANSION**

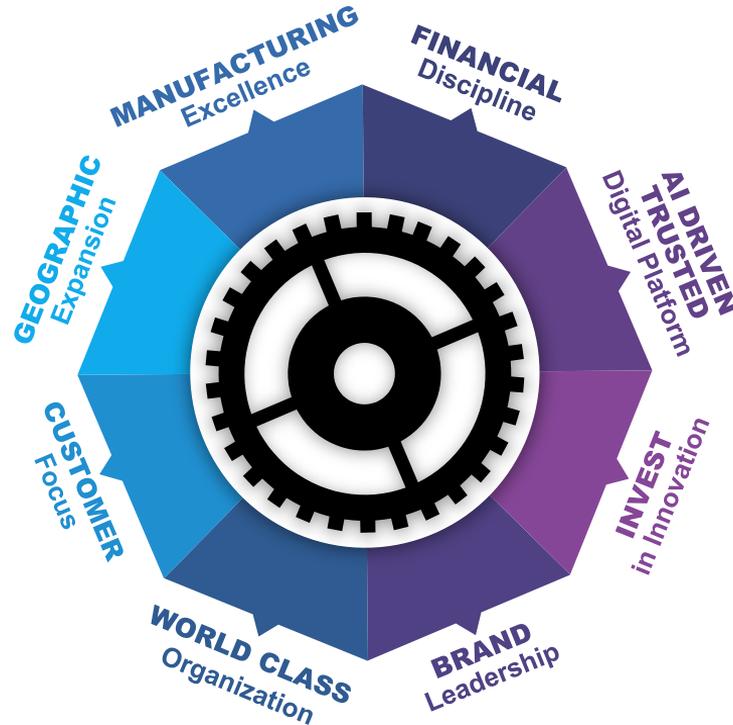
- > 100 Markets
- 13 Fab & Treat locations

## **DIVERSIFIED CUSTOMER BASE**

- > 200K Orthos and GP dentists
- 90K+ software installations

## **STRONG WORKFORCE**

- > 2K Specialty Reps
- > 1K+ Engineers
- ~ 12K+ Manufacturing Experts



## **RELIABLE FINANCIAL RESULTS**

- Excellent Top-line & profit growth
- Strong Balance Sheet
- Great cash generation

## **LEADING DIGITAL PLATFORM**

- Strong Digital Technology in ClinCheck® & iTero™ scanners
- Flexible design (integrate exocad)

## **PRODUCT, TECHNOLOGY, AND IP**

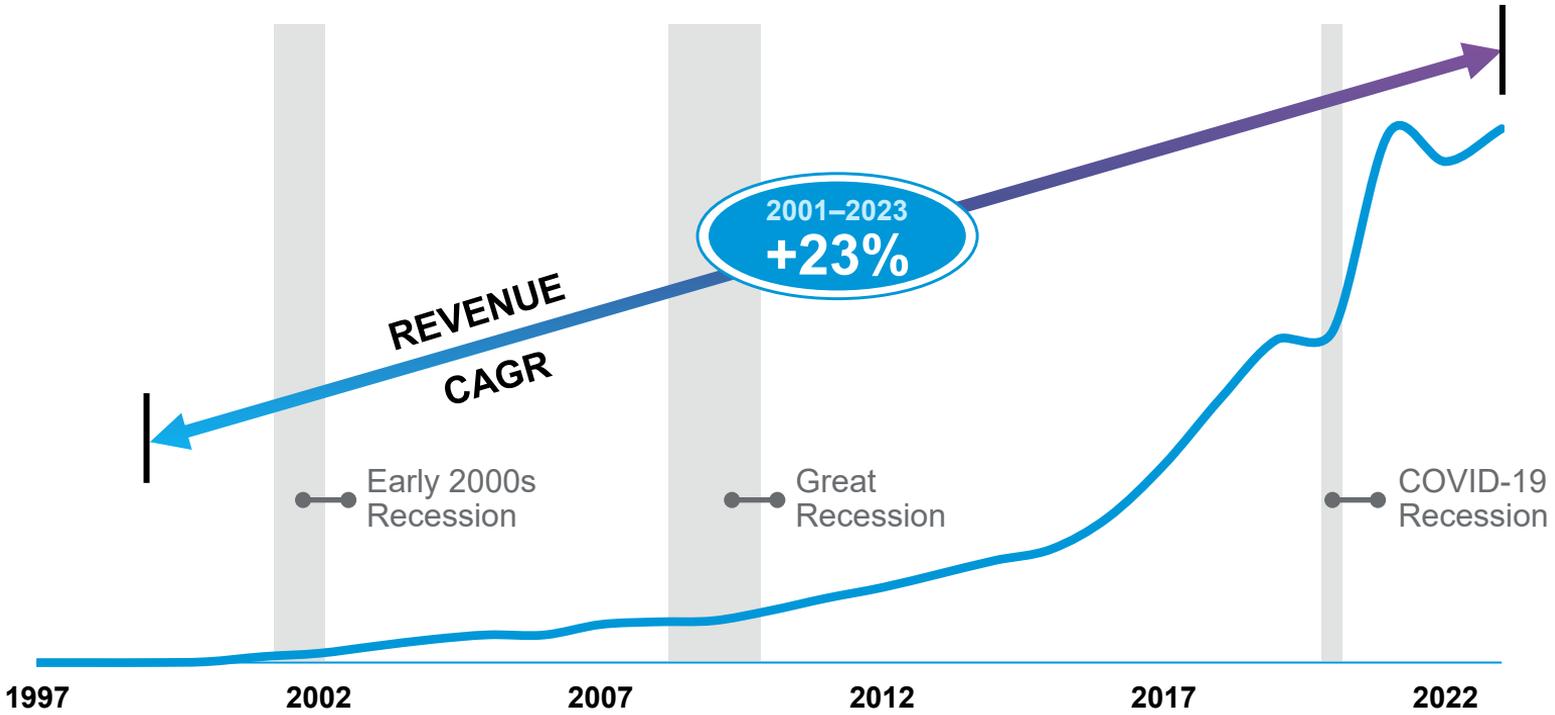
- Investing >\$400M in technology this year
- Partnership with leading universities
- Healthy Product / Technology pipeline
- > 1.6K+ patents

## **TOP BRAND FOR ALIGNER & SCANNER**

- \$200M+ annual brand investment
- > 15.7M+ satisfied patients

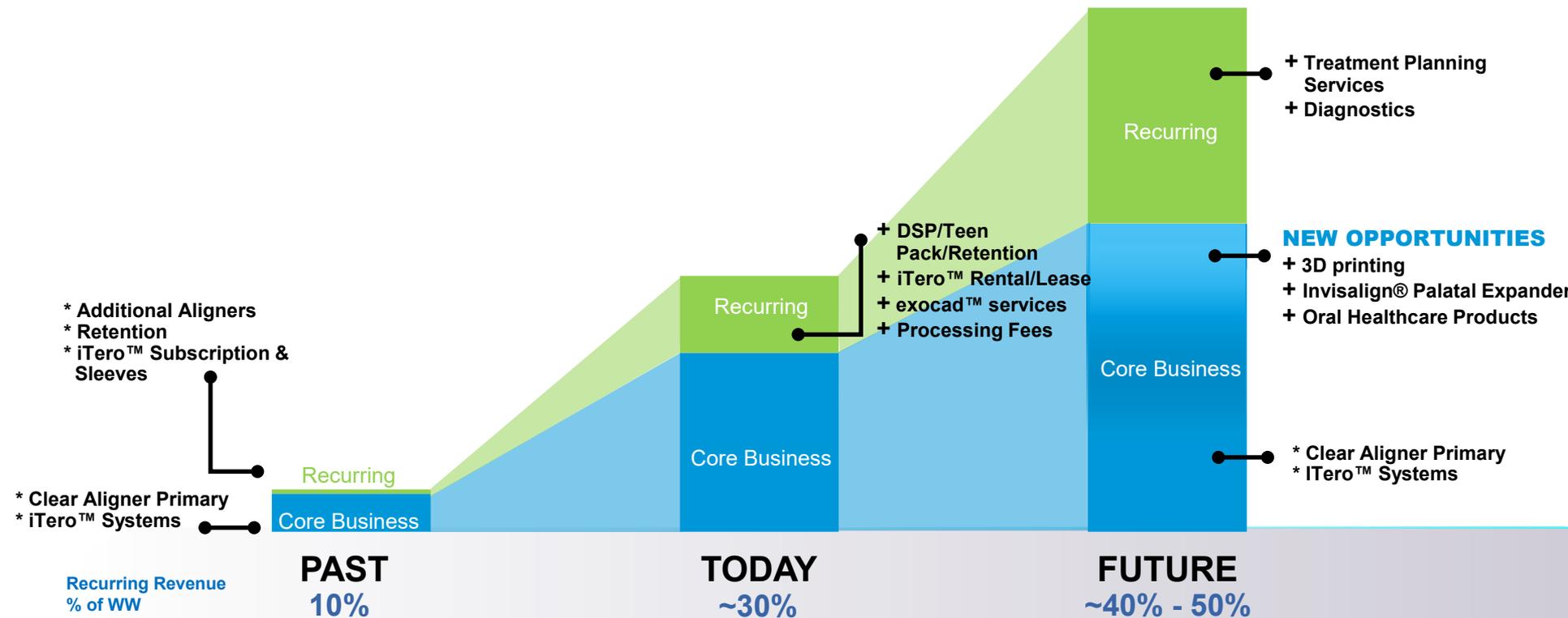
# +23% REVENUE CAGR for over 20 years

Relentless focus and reliable execution



\*CAGR based on mid-point of revenue guidance for the full year 2023, as of July 26th, 2023

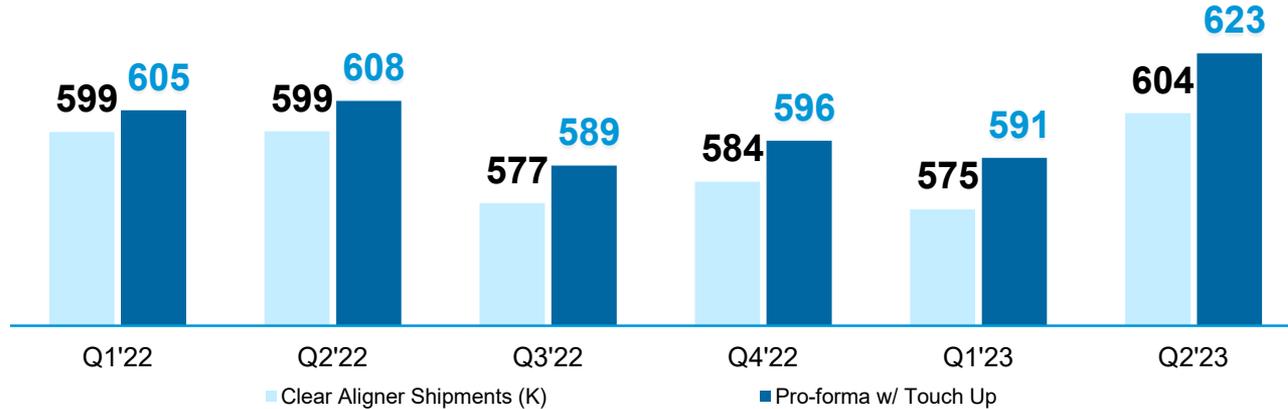
# INNOVATION drives future growth



Accelerates transition from Appliance to Platform and grows Recurring revenue

# EXAMPLE: Clear Align Shipments (DSP Touch-up)

Drives Clear Aligner adoption and growth...



	Q1'22	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23
<b>DSP Touch-up Shipments (K)</b>	6.6	9.3	11.4	12.4	15.5	18.2
Clear Aligner Shipments Y/Y%	0.5%	-10%	-11.9%	-7.5%	-3.9%	0.9%
<b>Pro-forma Shipments w/ Touch-up Y/Y%</b>	1.4%	-8.9%	-10.7%	-6.3%	-2.4%	2.4%
North American Orthodontists Utilization	26.8	26.8	25.9	24.8	26.2	26.4
<b>Pro-forma Utilization w/ Touch-up</b>	27.8	28.1	27.6	26.7	28.7	29.2

# DSP TOUCH-UP CASE:

compared to Invisalign® Express Products

## DSP TOUCH-UP\*

Up to **10 STAGES** with **ANNUAL SUBSCRIPTION**

Discounted at slightly higher than **ADVANTAGE DIAMOND+ DOCTORS**

Above average **GROSS MARGIN**

	Invisalign Express 5	Invisalign System Express	Invisalign Express 10
List Price	\$ 459 - \$ 605	\$ 569 - \$ 749	\$ 759 - \$ 1,009
Stages	Up to 5	Up to 7	Up to 10

\*NA DSP program

# GROSS MARGIN\*

Manufacturing excellence drives long-term competitive advantage



**INNOVATION, PRODUCT PORTFOLIO, AND SCALE ENABLES IMPROVED GROSS MARGINS**

\*Gross Margin is Non-GAAP

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align™ | \* invisalign® | iTero® | exocad®

# OPERATING MARGIN\*

## Operational execution delivers shareholder returns



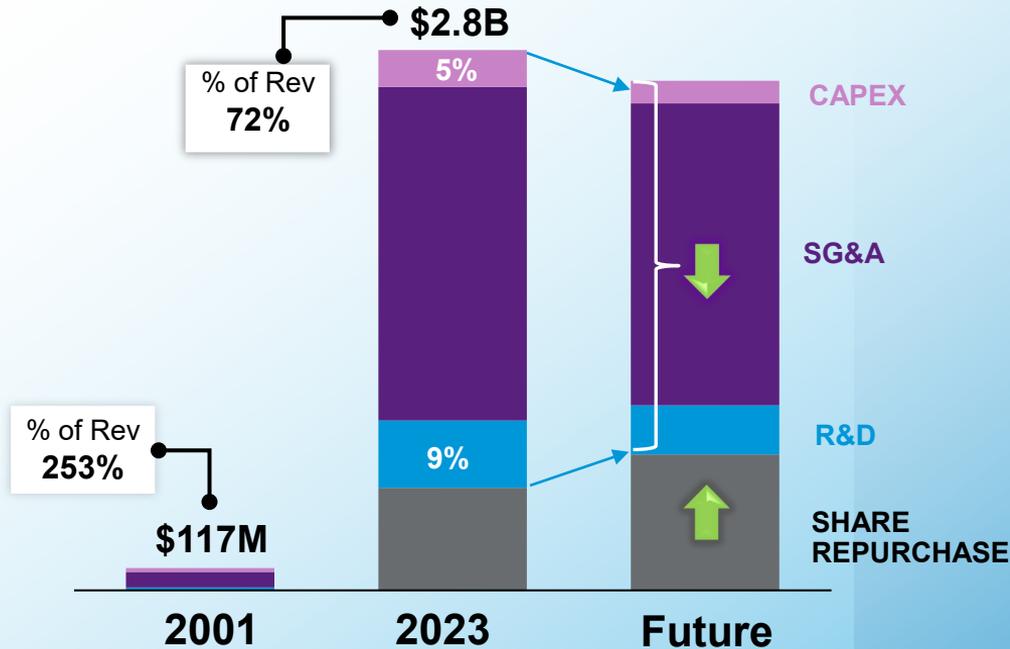
## FINANCIAL STRENGTH AND SHAREHOLDER VALUE

\*Operating Margin is Non-GAAP

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# TODAY'S INVESTMENTS drive TOMORROW'S GROWTH

## INVESTMENT ALLOCATION <sup>1</sup>



1) All numbers are on a GAAP basis

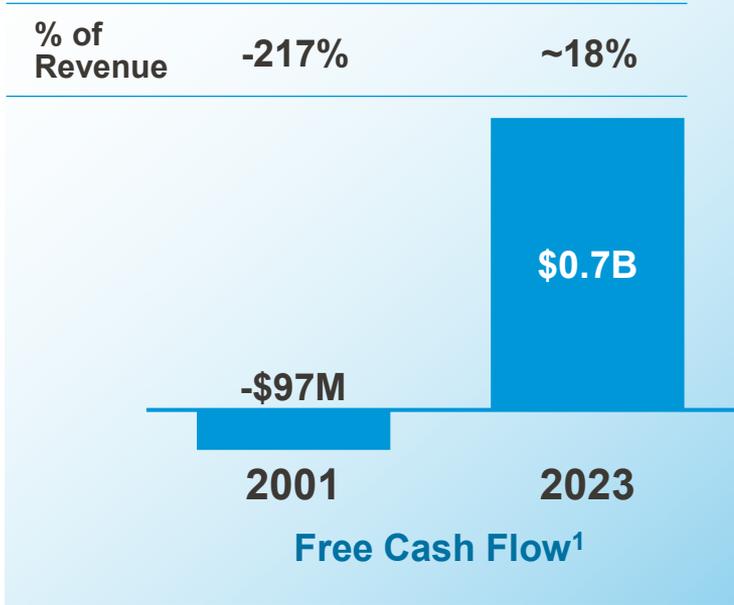
- Investing for growth
  - Focused on Customers
  - Operational Expansion
  - Strengthen the Sales force
  - Investments in R&D and Product Innovation
  - Strategic Investments
  - Deploy CAPEX as necessary
- Op. Margin leverage
- Return surplus cash to shareholders

# STRONG CASH FLOW and strong BALANCE SHEET

...enables investing for growth and return to shareholders

>\$4.5B FCF GENERATED

15% CAGR

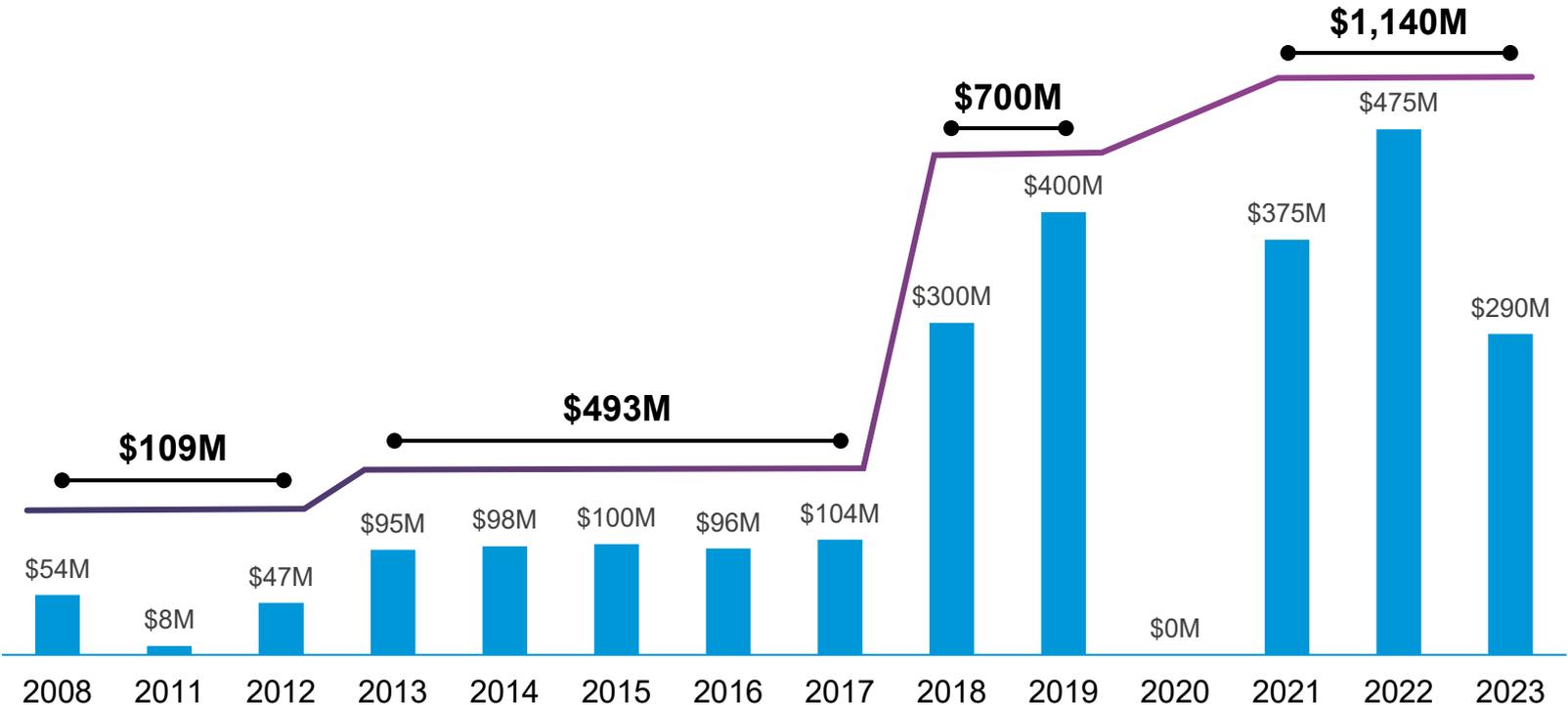


<sup>1</sup> FCF is a non-GAAP number and is defined as cash flow from operations less purchase of property, plant and equipment. See the Free Cash Flow Reconciliation.

\* Excludes future share buyback.

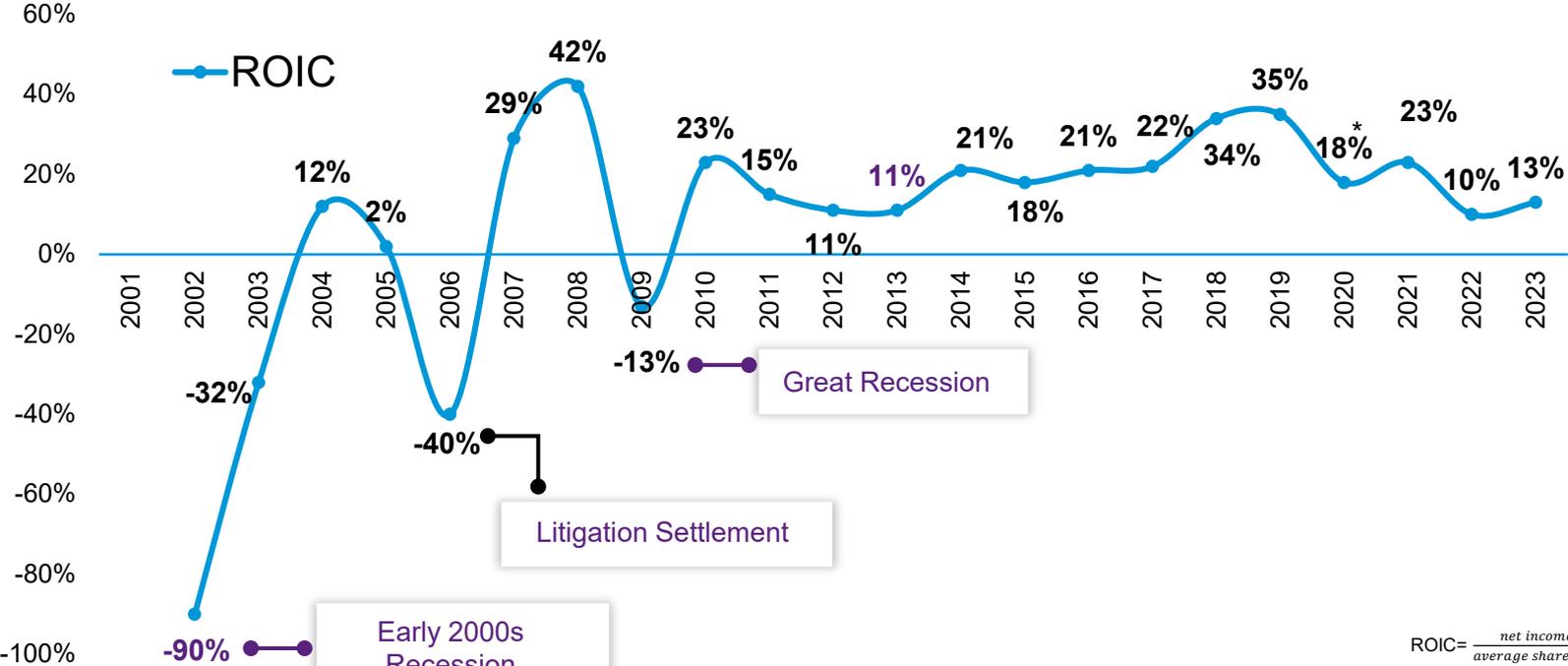
# Over \$2.4B in share RE-PURCHASES

... reiterates our confidence in the long-term model



\*2023 is through Q2 YTD

# Significant Return on **INVESTED CAPITAL**



$$ROIC = \frac{\text{net income after tax}}{\text{average shareholders equity}}$$

$$\text{Average shareholders equity} = \frac{\text{opening} + \text{closing shareholders equity}}{2}$$

\* Excludes - \$1.4B in one-time net tax benefit for the deferred tax asset and certain costs associated with the intra-entity transfer of certain intellectual property rights and assets to our Swiss subsidiary and related tax impact from the amortization of the transferred intangibles assets.

# Reiterating 3-5 year **FINANCIAL MODEL TARGETS**

	<b>LTM</b>
<b>Revenue Y/Y%</b>	<b>20% - 30%</b>
<b>Gross Margin %</b>	<b>73% - 78%</b>
<b>Operating Expense %</b>	<b>45% - 50%</b>
<b>Operating Margin %</b>	<b>25% - 30%</b>
<b>Free Cash Flow<sup>(1)</sup></b>	<b>20% - 25%</b>

1) Free cash flow is defined as cash flow from operations less purchase of property, plant and equipment and is a non-GAAP measure.

We are **CONFIDENT** in our **LONG-TERM MODEL**

We strongly **BELIEVE** in the large untapped **MARKET OPPORTUNITY**

We will **RELIABLY EXECUTE** to create our **COMPETITIVE ADVANTAGE**

Next wave of **INNOVATION** will be **TRANSFORMATIVE** and **REVOLUTIONARY**

# Free Cash Flow reconciliation

(\$)	2001	2023
Cash Flow from Operations	\$(78M)	\$904M
Capital Expenditures	(\$19M)	(\$194M)
<b>Free Cash Flow*</b>	<b>\$97M</b>	<b>\$710M</b>

\*Free cash flow is defined as cash flow from operations less purchase of property, plant and equipment and is a non-GAAP measure.

align™ | ✨ invisalign® | iTero® | exocad®

# Investor Day '23

**THANK**  
YOU

align™ | ✨ invisalign® | iTero® | exocad®

# Investor Day '23

Future of digital  
orthodontics  
& dentistry

Next wave of  
innovation powered  
by **AI+ML** to deliver  
personalized care