

How to transform your practice workflow and patient experience with the iTero Lumina™ scanner.



Since 2013, **Dr. Marta Baird** has owned a boutique orthodontic practice in Pleasanton, CA.

Today, she is recognized as a Diamond Plus Invisalign® Provider with a primary focus on developing innovative workflows and new clear aligner techniques.

In addition to her private practice, she serves as an Assistant Clinical

Professor at the University of the Pacific's Arthur A. Dugoni School of Dentistry, where she educates students and residents on the effective use of clear aligners.

1. Introduction

I opened my start-up orthodontic practice in 2013 and received my first iTero™ scanner just one week before seeing my very first patient. From the outset, I was determined to avoid traditional impressions and embrace digital technology wherever possible. For five years, the original scanner met all our recordkeeping needs. Then Align released the iTero Element™ 2 scanner with advanced visualization tools, so we upgraded our system. That change prompted us to rethink our scanner's role—evolving it from a simple PVS replacement to a patient-communication and conversion device.

In the beginning, we only had one scanner, but as my practice grew and our use of the scanner expanded, I gradually added more units to meet the increasing demand for imaging services. I placed one scanner in the main consultation room, where it quickly became an essential instrument for patient communication and treatment acceptance. A second scanner is now in the backup consultation room, and a third is dedicated to progress and finish scans in the main clinic. Having three scanners has proven to be ideal to cover all our needs for both new and current patients.

Transitioning to iTero Lumina™ scanner was a natural progression. The smaller¹ wand, faster² scanning speed, and higher image resolution have significantly improved our diagnostic capabilities and overall workflow. This upgrade has delivered an excellent return on investment in our practice by enhancing practice team efficiency³, reducing chair time³, and elevating the patient experience⁴, leading to increased treatment acceptance.

Moving from the legacy iTero scanners to the latest iTero Lumina scanner has transformed my clinical practice in three key areas: practice efficiency, patient engagement, and staff experience.

2. Superior practice efficiency

At our practice, we scan an average of 12 times per day. With the iTero Lumina scanner, our scan speed has improved by approximately 30 seconds per scan—saving us 1.5 hours per month or 18 hours per year. Given that a 15-minute appointment is valued between \$350 and \$550, these time savings represent a significant financial benefit amounting to between \$25,000 and \$40,000 yearly⁵.

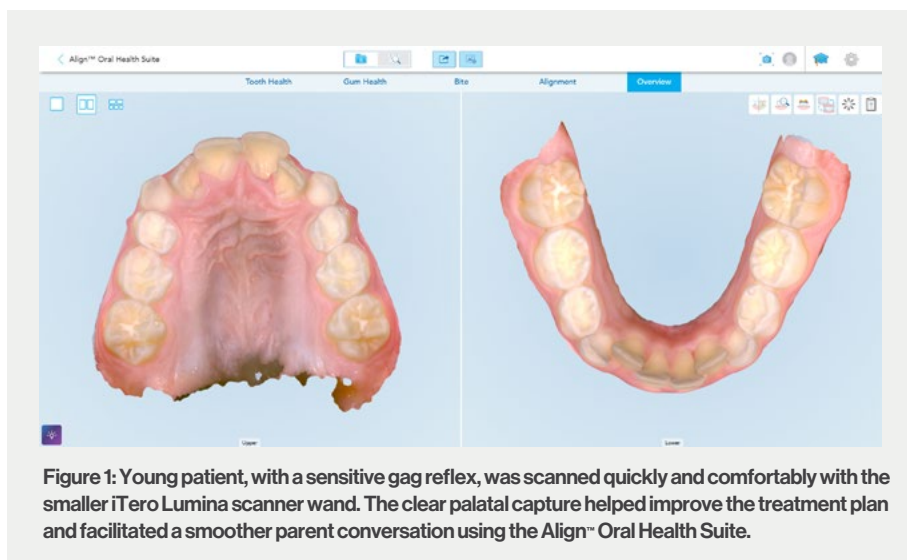
Daily savings:
– 12 scans
x 30 seconds

Aggregated savings:
1.5 hours monthly,
18 hours yearly

Financial opportunity:
equivalent to
\$25,000 – \$40,000
annually based on
the appointment
value

Scanning palates and edentulous areas has become effortless thanks to the iTero Lumina scanner's large field of view, which is three times larger than that of the iTero Element scanners⁶. This expanded field of view allows us to capture more surfaces at once, resulting in faster scans. The time saving benefits are even higher for younger patients (Figure 1) with smaller mouths⁷ and for those requiring the Invisalign® Palatal Expander.

Furthermore, the photorealistic quality of scans from the latest iTero scanners has allowed us to eliminate the need for



intraoral photographs over the past two years⁸. There are two primary reasons for this change.

First, we found that replacing conventional intraoral photography with scanning saves 10 minutes per patient. With an average of 12 scans per day at our practice, this translates into:

**384 hours
saved yearly**
**32 hours
saved monthly**
**2 hours
saved daily**

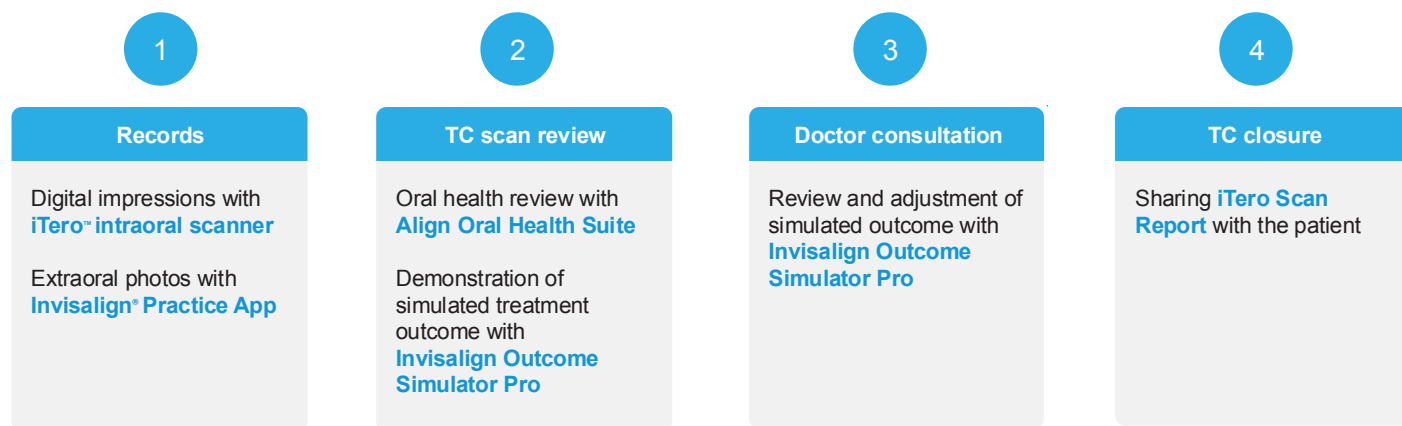


**16 extra days
annually**

We now invest the time saved in patient care, staff training, and fitting more consultations in our schedule without adding extra days.

Second, we are committed to providing an exceptional first experience for our patients. Traditional dental photography can be uncomfortable—cheek retractors stretch the cheeks and mirrors press against the tongue and soft tissues to capture a full view of the posterior teeth. It's also highly technique-sensitive, demanding extensive training for new staff and ongoing quality checks to ensure consistent results. In contrast, digital scanning provides reliable, detailed records with minimal discomfort and with far less dependence on operator skill.

Elements of the Align™ Digital Platform implemented at Baird orthodontics for new patient consultations



3. Enhanced patient experience

When a new patient arrives, our practice staff begin with an intraoral scan using the iTero Lumina scanner. Next, we capture extraoral photographs with the Invisalign Practice App and take CBCT scans to ensure we have all the information needed should they decide to proceed. We perform scans at every consultation—regardless of whether the patient commits to treatment.

Next, our Treatment Coordinator (TC) uses the Align Oral Health Suite's (Figure 2) guided workflow to review the scans with the patient on the scanner screen. She highlights any concerns with tooth and gum health, alignment, and bite. The key at this stage is to encourage the patient to interact with the scan—view it, rotate it, and explore it. For most patients, this is their first time seeing their teeth in such detail, and hands-on engagement helps them understand their dental health better than ever before.

Reviewing the patient's simulated treatment outcomes is central to our consultation process. Invisalign Outcome Simulator Pro gives us the ability to show patients a realistic in-face visualization of their potential post-treatment smile. This has significantly increased case acceptance, particularly with adult patients requiring complex orthodontic and restorative treatment (Figure 3).

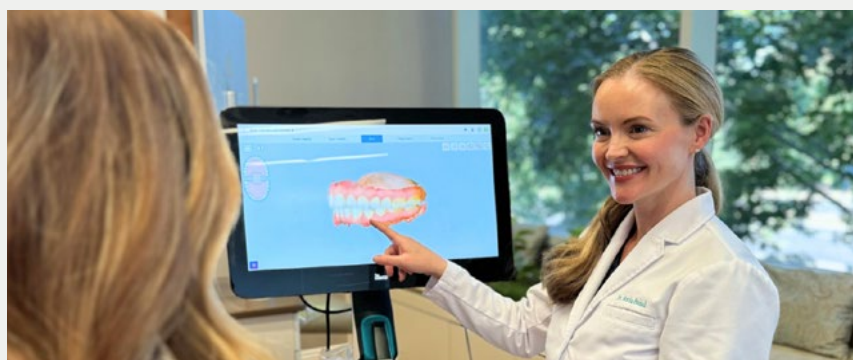


Figure 2: Dr. Baird reviews oral health status with a patient using the Align™ Oral Health Suite.

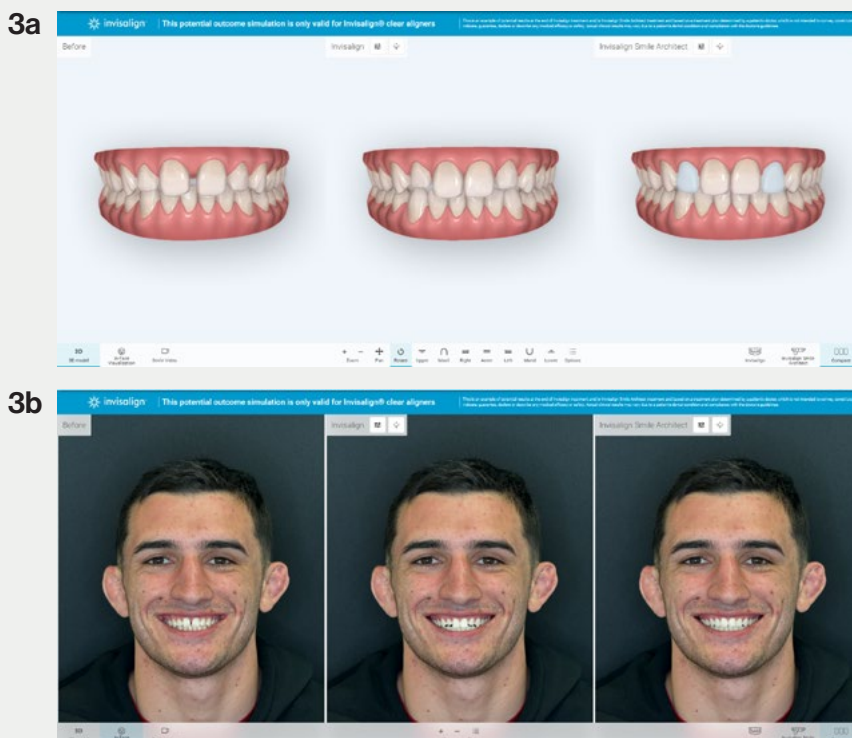


Figure 3 a&b: An adult patient presented with spacing and small upper laterals. The Invisalign Outcome Simulator Pro with Multiple Treatment Simulations allowed me to visually present two treatment options: close the spaces with IPR or prepare for restorative work. The patient chose the restorative route after seeing a realistic simulation, and I collaborated directly with their dentist using Invisalign Smile Architect for ortho-restorative treatment planning.

Initially, the outcome simulation is shown to the patient by the TC, while I review the records in the cloud. By the time I enter the room, the patient has already seen their potential new smile, allowing us to focus our conversation on finalizing the treatment plan. Delegating these initial steps to my team lets me focus my time where it matters most. Once we agree on the

plan, I hand off the patient back to the TC to handle the financial discussion.

At the end of every consultation, we provide each patient with their personalized iTero scan report (Figure 4). This report includes screenshots of their simulated treatment outcome, scan images, and any annotated observations from

their oral health check. If a patient doesn't begin treatment immediately, we remind them that their scan is valid for 90 days—creating a gentle sense of urgency while reducing the need for follow-up appointments to repeat the scan. Many patients, who initially hesitate to start treatment, ultimately return within that window after reviewing their scan report at home.

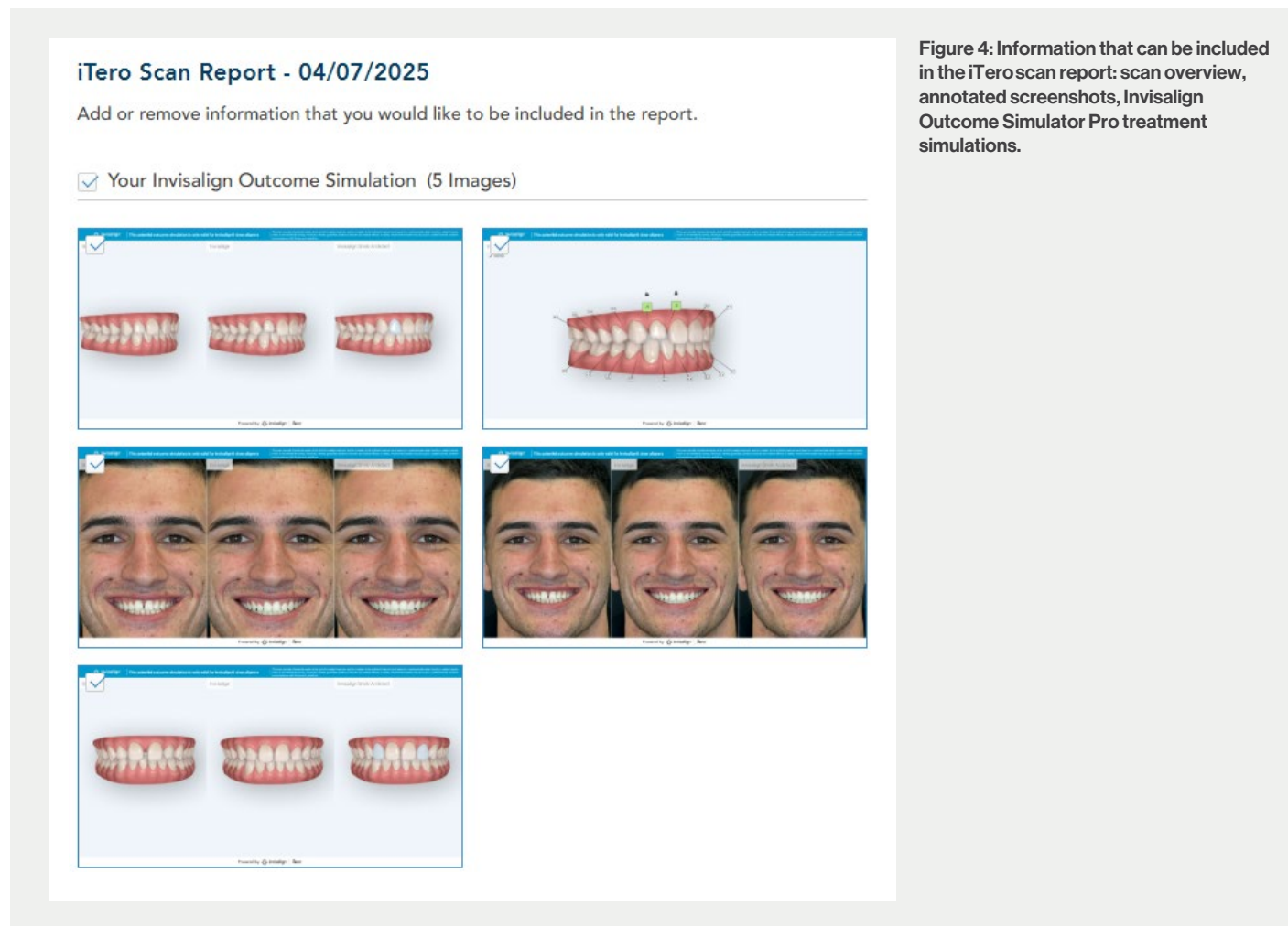


Figure 4: Information that can be included in the iTero scan report: scan overview, annotated screenshots, Invisalign Outcome Simulator Pro treatment simulations.

4. Improved staff experience

The new iTero Lumina has benefited patients and staff, reduced the amount of training required and improved practice efficiency. Although my team

was initially cautious about moving from our previous scanner to the iTero Lumina scanner because of its different technique, they mastered it after just one or two short training sessions. In fact, our treatment coordinator—who'd never performed a scan before—was completing scans with the iTero Lumina scanner in under three minutes with minimal guidance.

The smaller and lighter wand reduces hand strain and improves scanning comfort for staff during back-to-back appointments⁹. Staff no longer need to hold cheek retractors in place for extended periods since the iTero Lumina scanner's clarity and extended field of view capture more data quickly and accurately while maintaining exceptional scan quality.¹⁰

5. Conclusion

Upgrading to the iTero Lumina scanner transforms orthodontic practices by enhancing clinical workflows, patient communication, and team productivity. Faster scanning and an expanded field

of view streamline daily operations, while superior image clarity replaces the need for traditional intraoral photography—resulting in more efficient, comfortable appointments. Powerful visualization tools such as Align Oral Health Suite and Invisalign Outcome Simulator Pro help increase patient engagement, drive higher

treatment acceptance and increase referrals. Staff also benefit from the ergonomic wand design and intuitive interface, which reduce hand strain and shorten onboarding time—allowing teams to master the technology quickly and maintain peak efficiency throughout the day.

6. Bonus section – Smile Video within Invisalign Outcome Simulator Pro

In the past, when we wanted to help patients visualize their treatment outcomes, we relied on case studies of similar patients treated previously. Through imagination and storytelling, we would illustrate to patients how their smile might look after two years of treatment.

The introduction of the Invisalign Outcome Simulator in 2013 marked a significant advancement, enabling us to show patients potential treatment results using their own scans. This tool improved patient understanding, facilitated more meaningful conversations, and simplified the informed consent process (Figure 5).

More recently, Align Technology introduced the Invisalign Outcome Simulator Pro, elevating patient communication further by providing realistic in-face visualizations of simulated treatment outcomes. The innovation continued this year when I was among the early adopters to test the new Smile Video feature within the software. This new functionality allows creating a dynamic and emotionally engaging representation of the potential treatment result. In my experience, Smile Video has proven to be an exceptionally powerful tool,

building emotional connections with patients and driving higher treatment acceptance.

Currently, we leverage three distinct Smile Video simulation options to support our patient interactions from the initial consultation through to treatment planning:

- The first is Smile Video within the Invisalign Practice App, powered by AI technology. This tool has become essential in marketing and patient communication, allowing patients to see and emotionally connect with their simulated post-treatment smiles.
- The second is Smile Video integrated into Invisalign Outcome Simulator Pro, specifically designed for visualizing orthodontic and

ortho-restorative treatments. It allows customized simulations, to help enhance treatment acceptance and support informed consent.

- Finally, Smile Video in ClinCheck® software facilitates detailed treatment planning by providing a visual representation of the planned tooth movements within the patient's actual facial context. This helps make precise treatment decisions and effectively communicate anticipated outcomes to patients.

Collectively, these Smile Video capabilities have improved patient understanding, particularly among adults new to orthodontic care, and enhanced our communication and treatment planning workflows.



Figure 5: Dr. Baird discusses potential treatment outcome with the patient using Invisalign Outcome Simulator Pro.

References

1. The iTero Lumina intraoral scanner wand is 50% smaller and 45% lighter than the iTero Element 5D imaging system wand. Compared to iTero Element 5D imaging system wand, excluding the wand cable. Data on file at Align Technology, as of November 15, 2023.
2. The iTero Lumina intraoral scanner is designed to enable 2x faster* scanning compared with previous iTero intraoral scanners. Compared to the iTero Element 5D imaging system with tolerance AVE=±0.1 operating at a working distance from 0-20 mm. Data on file at Align Technology, as of November 15, 2023.
3. Majority of surveyed users agree that the iTero Lumina intraoral scanner increases clinic productivity and efficiency. Based on a survey in September 2023 of n=22 users who participated in a global limited market release, working with iTero Lumina intraoral scanner for an average period of 6 months, representing both Invisalign trained general practitioners and orthodontists, and their staff in NA, EMEA and APAC, who were presented with a 4 point level of agreement scale from strongly agree to strongly disagree with the following statement: "The iTero Lumina intraoral scanner increases the efficiency and productivity in my clinic." Compared to the iTero Element 5D imaging system with tolerance AVE=±0.1 operating at a working distance from 0-20 mm. Data on file at Align Technology, as of November 15, 2023.
4. The iTero Lumina intraoral scanner is designed with a thinner wand tip to enable a more comfortable patient experience. Compared to iTero Element 5D imaging system wand. Data on file at Align Technology, as of November 15, 2023.
5. Examples are for illustrative purposes only and do not guarantee a particular result.
6. The iTero Lumina intraoral scanner's Multi-Direct Capture™ technology, with its wider field of view^a, large capture distance^b and multi-angle capture^c, is designed to simplify capture of challenging areas like the palate, edentulous spaces, partially erupted teeth and crowded teeth.
 - a. The iTero Lumina intraoral scanner offers 3x larger field of view designed for more surface area capture enabling faster scanning. *Compared to the field of view of the iTero Element 5D imaging system, when the iTero Lumina intraoral scanner's scanning distance is 12 mm.
 - b. The iTero Lumina intraoral scanner boasts a 25 mm capture distance.
 - c. The iTero Lumina intraoral scanner offers simultaneous multi-angle capture designed for less maneuvering.
7. Majority of surveyed users agreed that the iTero Lumina intraoral scanner enables faster and easier scans of children and teenagers. Over other iTero scanners in their respective clinics. Based on a survey in September 2023 of n=22 users who participated in a global limited market release, working with iTero Lumina intraoral scanner for an average period of 6 months, representing both Invisalign trained general practitioners and orthodontists, and their staff in NA, EMEA and APAC, who were presented with a 4 point level of agreement scale from strongly agree to strongly disagree with the following statement: "The iTero Lumina intraoral scanner enables faster and easier scans of children and teenagers." Data on file at Align Technology, as of November 15, 2023.
8. Majority of surveyed Invisalign trained doctors and their staff agree that the iTero Lumina intraoral scanner's superior 3D model eliminates the need to take intraoral photos for Invisalign treatment submission. Based on a survey in September 2023 of n=22 users who participated in a global limited market release, working with iTero Lumina intraoral scanner for an average period of 6 months, representing both Invisalign trained general practitioners and orthodontists, and their staff in NA, EMEA and APAC, who were presented with a 4 point level of agreement scale from strongly agree to strongly disagree with the following statement: "The iTero Lumina intraoral scanner's superior 3D model eliminates the need to take intraoral photos." Data on file at Align Technology, as of November 15, 2023.
9. The iTero Lumina intraoral scanner is designed for enhanced comfort and scanning experience for both the user and the patient. Data on file at Align Technology, as of November 15, 2023.
10. The iTero Lumina intraoral scanner is powered by the new, proprietary iTero Multi-Direct Capture technology developed to capture more data^a quickly^b and accurately^c while maintaining exceptional scan quality.
 - a. The iTero Lumina intraoral scanner offers 3x larger field of view designed for more surface area capture enabling faster scanning.
*Compared to the field of view of the iTero Element 5D imaging system, when the iTero Lumina intraoral scanner's scanning distance is 12 mm.
 - b. The iTero Lumina intraoral scanner is designed to enable 2x faster* scanning compared with previous iTero intraoral scanners.
*Compared to iTero Element 5D imaging system with tolerance AVE=±0.1 operating at a working distance from 0-20 mm.
 - c. The iTero Lumina intraoral scanner has scientifically proven greater accuracy* for your clinical orthodontic needs.
*Greater global accuracy in comparison with the global accuracy of the iTero Element™ 5D imaging system.

The opinions expressed in this publication are those of the author and may not reflect those of Align Technology, Inc. The authors were paid an honorarium by Align Technology, Inc. in connection with this publication.