Still leading the pack: New studies confirm the exceptional accuracy of Primescan

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**About Dentsply Sirona**   
Dentsply Sirona is the world’s largest manufacturer of professional dental products and technologies, with over a century of innovation and service to the dental industry and patients worldwide. Dentsply Sirona develops, manufactures, and markets a comprehensive solutions offering including dental and oral health products as well as other consumable medical devices under a strong portfolio of world class brands. Dentsply Sirona’s products provide innovative, high-quality and effective solutions to advance patient care and deliver better and safer dental care. Dentsply Sirona’s headquarters is located in Charlotte, North Carolina. The company’s shares are listed in the United States on NASDAQ under the symbol XRAY.

Visit [www.dentsplysirona.com](https://www.globenewswire.com/Tracker?data=H97WicgzG_xFpTdBIif_-p2x1L1RbXqW3Uq-ulnMhNJ3BMN94ZMBad6NkshrN74sA1UXTZDP2YWPaV1yUwIYAWYuwTJlwnjChzzdpgGH3w8=) for more information about Dentsply Sirona and its products.

Press Release

**Dentsply Sirona presented the latest generation of its intraoral scanners at the beginning of last year: Primescan enables users to take a digital impression of the entire jaw with outstanding accuracy. This has been demonstrated by several international studies that support the extensive positive feedback on Primescan from various dental practices with clear scientific data.**

**Charlotte/Bensheim, November 12th, 2020.** Primescan, the latest generation of intraoral scanners, is designed for different digital workflows – in practice with CEREC as well as with the dental laboratory or other partners. Using the Connect software, a digital 3D model can be transferred directly to the laboratory of choice for further processing. Using high-resolution sensors and a short-wave light, a scan of the tooth surfaces is accurately captured. Up to one million 3D pixels per second are captured by Primescan, and these can be executed more reliable than ever using optical high-frequency contrast analysis.

**New studies confirm high performance of Primescan**

Primescan enables highly precise digital impressions to be taken over the entire jaw, as evidenced by a 2019 University of Zurich study.1 Recently, Primescan’s accuracy has been further demonstrated once again by national and international studies.3-5

The study of Dutton et al. demonstrates the versatility of the acquisition technology of Primescan, as it not only records natural and prepared tooth surfaces with high precision, but also captures materials used in dentistry with a high degree of accuracy across all substrates and for complete arch scanning.3 They further tested the effect of different substrates on the trueness and precision of eight different intraoral scanners. In 11 out of 15 categories, Primescan ranked number one, and for the remaining four categories, Primescan ranked among the top three.3

Primescan’s impressive degree of precision in taking digital impression over the entire jaw1 continues. An in-vivo study done by the University of Gießen confirms the accuracy of digital and conventional full-arch impressions in patients, and results show that among the tested scanners, only Primescan showed no significant deviations to long-span accuracies obtained with conventional impressions.4

A study by Beijing University tested the precision of Primescan and two other intraoral scanners in edentulous jaws. The precision of Primescan was significantly better than the other two scanners for maxilla.5 In trueness of the three scanners, when scanning the maxilla and mandible, there was no significant difference.5

The results of the 2020 in vitro study by the University of Zurich showed that the preparation margin accuracy of Primescan was significantly better than the other intraoral scanning systems involved in the study in local accuracy for single-tooth preparations.2

Dentists like the fact that, with Primescan, it is possible to scan deep regions (up to 20 mm). This allows a digital impression even with subgingival or particularly deep preparations. Almost all tooth surfaces are captured, even when scanning from a very sharp angle.

**Our customers are our compass**

“The studies confirm again that, with Primescan, we have provided our customers with a high-quality technology that delivers truly impressive results," said Dr. Alexander Völcker, Group Vice President CAD/CAM at Dentsply Sirona. "We continue to add and improve workflows with Primescan as we’re convinced Primescan’s outstanding technology opens the doors for more applications in digital dentistry. Thanks to the technology of high-frequency contrast analysis, Primescan enables our customers to achieve outstanding accuracy in digital impression. And the extensive positive feedback from our respected experts and users all over the world, our most important compass, encourages us to continue to lead in this area’s development and innovation.”

“As a dentist, my expectation of myself is to deliver exceptional results for every one of my patients.” said Dr. Carlos Repullo, a dentist from Seville, Spain. “And with Primescan I can do so: the scan delivers a precision that one can scarcely imagine being improved. And this also applies to a full jaw scan, which can be prepared exceptionally quickly. This is exactly the quality we need in our practices.”

More information about Primescan at: [www.dentsplysirona.com/primescan](http://www.dentsplysirona.com/primescan)

**References**

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**IMAGES**   
are available for [**> Download**](https://news.dentsplysirona.com/en/business-units/cad-cam/2020/still-leading-the-pack--new-studies-confirm-the-exceptional-accu.html) on the website.

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| *Fig. 1: Experts once again confirm: Digital impressions made with Primescan are, fast and accurate and easy to take.1-5* | *Fig. 2: Dr. Alexander Völcker, Group Vice President at Dentsply Sirona CAD/CAM, sees promising prospects for digital impressions in dental and orthodontic practices.* |