In-office bleaching is rapidly growing in popularity as patients demand faster bleaching results.

If you are new to chairside whitening, this guide will help you understand how to achieve the results you want.

Chairside Whitening Gel
Most in-office chairside whitening gels have a high concentration of H₂O₂. Due to the highly reactive nature of peroxide, some of them need chairside mixing. Rembrandt® Virtuoso™ Lightning Bleaching Gel is a ready to use, stabilized, H₂O₂ gel. It contains fluoride and a desensitizing agent to reseal the bleached enamel surface and counteract the possibility of transient sensitivity.

Shelf life is another important aspect of chairside whitening gels. Peroxide gels liquify when they are old. Some gels only have a shelf life of a few weeks. Rembrandt Virtuoso Lightning Bleaching Gel has a shelf life of nine months.

Using a Plasma Arc Light To Enhance the Bleach
Whitening results are directly related to the concentration of the bleaching gel and bleaching time. Research also found that specific light wavelengths enhance the bleach. A university study compared bleaching efficacy of an in-office gel (Rembrandt Virtuoso Lightning Bleaching Gel) with or without light application in 20 adult subjects using a “split-quarter” design. Paint-On Dental Dam was applied to labial gingiva, and the gel was placed over the labial surface of the six maxillary or mandibular anterior teeth. For the half of each arch receiving light treatment, each of the three teeth was treated with a Den-Mat® Plasma Arc Light for five seconds, and the cycle was repeated for ten minutes. Tooth shade was determined by the same investigator, without knowledge of treatment, using the Bioform Color Ordered Shade Guide (Dentsply) at the baseline, post-bleaching, and 7 day marks. The average numerical shade reduction for maxillary teeth without light treatment was 6.13, while for those treated with a light it was 8.80. The effect of light treatment was more evident for mandibular teeth; the shade reductions were 11.12 with light treatment and 6.97 without light treatment. The difference was highly significant. It is concluded that the application of a Den-Mat Plasma Arc Light significantly enhances the efficacy of Rembrandt Virtuoso Lightning Bleaching Gel; the enhanced bleaching efficacy is more evident for mandibular, anterior teeth; and there were no significant clinical adverse effects (Fig. 1 in the shade change difference with and without the Rembrandt Sapphire Plasma Arc Light).

It should be noted that Den-Mat’s Rembrandt Sapphire Plasma Arc Light not only enhances bleach it is also an excellent high intensity, fast-curing light for curing all light-cured composites (Fig. 2 shows the Rembrandt Sapphire Plasma Arc Light with the protection shield on the light curing tip).

Soft Tissue Protection
Due to the high concentration of H₂O₂ care must be given to protect the gingival, and other soft tissues. It is a good idea to apply a thin coat of petroleum jelly to the lips before starting the bleaching process. A resin-based, light-cured, dam material (such as Paint-On Dental Dam) usually works better than rubber dams due to the complete seal of the gingival tissue. Air dry the gingiva and apply Paint-On Dental Dam around 1 or 2 teeth at a time and cure. Hold the curing tip about one inch away from the gingiva (if a Plasma Arc Light is used). Paint-On Dental Dam has an optimal curing mechanism to match the
Rembrandt Sapphire Plasma Arc Light and 1 or 2 seconds of light exposure is sufficient curing time. Besides the isolation of the gingiva, using a cheek retractor with a tongue stop is also recommended.

How much whitening is white?
Whitening is the measurement of color change. Some patients might have unrealistic desires of "snow white" teeth. It is critical to record the shade of the teeth with the shade guide. The Bioform color shade guide works very well for that purpose. It is a good idea to let patients see where their shade is on the shade guide. The darker or more yellow the teeth, the better the chances for more significant whitening. It is easier to have a 10 shade whitening, for example, if a patient starts at B81 or darker. On the other hand, it is impossible to achieve the same amount of whitening if a patient starts at shade B52 or lighter. There is simply no room on the shade guide to further the whitening. Explain to your patients that there is an individual difference in whitening. One-hour bleaching can give some people great whitening while others may need 2, one-hour treatments. For the same reason, it is always a good idea to take an impression and make a home bleaching tray for the chairside-bleaching patient. The tray can be used to enhance the bleaching or maintain the whitening. Once the chairside bleaching procedure is finished, show the shade guide tab to the patient so they can see how many shade changes were achieved.

Protecting the Whitening Result
Several independent universities reported that daily brushing with Rembrandt Plus or Rembrandt Dazzling White® toothpaste not only helps patients maintain the whitening achieved from professional bleaching but will also achieve additional whitening. After the desired whitening is achieved, advise the patient to reduce the consumption of coffee and tea, and to avoid smoking or any other habit that may cause the teeth to stain. Recommend a bleaching toothpaste (such as Rembrandt Plus or Rembrandt Dazzling White toothpaste), which contains active carbamide peroxide.

What's new?
The latest advancement in chairside whitening is the Rembrandt One-Hour Whitening Program. The program utilizes the Rembrandt Sapphire Plasma Arc Light and Rembrandt Virtuoso Lightning Bleaching Gel to perform one-hour, chairside bleaching and other cosmetic procedures. Unlike other lights (which can only be used to bleach), the Rembrandt Sapphire light employs a standard curing tip (for composite curing and individual tooth whitening) as well as the Rembrandt Crystal (for dual arch bleaching). (Fig 3 shows the application of the Rembrandt Crystal on the stand ready to proceed with bleaching. Fig. 4 demonstrates the Rembrandt Crystal in operation.) The Rembrandt One-Hour Whitening Program transforms a regular dental office into a one-hour, tooth whitening, cosmetic center. It gives patients what they want and creates a life changing experience for both the patient and the dental professional. DT

Dr. Xinyi Yu is Vice President for Clinical Affairs at DenMat. He also practices in Santa Maria, CA.
For more information: 800.445.0345 • www.denmat.com