

Zoom! 6% Whitening Gel Efficacy Test, Michaux, S., Schmitt, P., Ward, M.

- Objective:** The primary objective of this study was to compare the teeth whitening efficacy of Zoom 6% hydrogen peroxide (HP) whitening gel with two treatment regimens, Day White 6% Hydrogen Peroxide or NiteWhite 6% Hydrogen Peroxide.
- Methods:** After screening qualifications were complete, each subject participated in an office treatment visit consisting of the ZOOM! 6% hydrogen peroxide gel formulation with a pre-pH booster treatment. Afterwards each subject was randomized to receive one of two possible take-home whitening kits. Half the subjects received a take-home kit consisting of the ZOOM! DayWhite gel formulation with active ingredient 6% hydrogen peroxide, while the remaining half of subjects received the ZOOM! NiteWhite gel formulation kit with an active ingredient consisting of a 16% carbamide peroxide solution.
- VITA Classic Shade measurements, 3D Master Bleachshade guide and VITA EasyShade measurements were taken at pre-and post-Zoom! Treatment and the patient returns after 3 days of using their take home treatment for a final shade measurement. A satisfaction survey was sent to all patients once all whitening treatments were completed.
- Results:** An examination of the shades taken between the baseline visit and the time the patient returns to the office, convincingly demonstrated the efficacy of the ZOOM! office teeth whitening procedure. On the VITA Classic scale, the whiteness improvement was observed to be 5.96 units (95% CI: 5.58,6.34), while on the 3D Master Bleachshade scale the whiteness improvement was observed to be 3.53 units (95% CI, 3.27,3.79). In addition the median improvement, as assessed through ΔE , was estimated at 95%CI: (3.48,5.47). The VITA Classical and 3D Master Bleachshade scales for the DayWhite and NiteWhite follow up regimen were seen to substantially enhance teeth whitening results beyond the initial office whitening. For the EasyShade parameters the DayWhite and NiteWhite were effective at de-yellowing teeth. The satisfaction survey showed patients whitening results were excellent and experienced minimal sensitivity.
- Conclusion:** Patients were satisfied overall with their whitening results achieved by in-office combined with take home treatment with minimal to no sensitivity

Patients achieved excellent whitening results

| Question | Response |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| How much do you agree, "I now feel very confident in my smile?" | 88% |
| After completion of your ZOOM treatment and using your custom trays at home for 3 days, how much do you agree, "I achieved excellent whitening results." | 100% |

Table 1: Longitudinal Results on VITA Classical & 3D Master Bleachshade Scales

| Time Interval | Measurement Scale | Treatment | Improvement | p-value |
|---------------------|-----------------------|--------------------|-------------------|---------|
| Baseline to Visit 2 | VITA Shade | Office Only | 5.96 | 0.0000 |
| | 3D Master Bleachshade | Office Only | 3.53 | 0.0000 |
| Baseline to Visit 3 | | VITA Shade | Office + DayWhite | 6.29 |
| | Office + NiteWhite | | 6.29 | 0.0000 |
| | 3D Master Bleachshade | Office + DayWhite | 3.74 | 0.0000 |
| | | Office + NiteWhite | 3.17 | 0.0000 |
| Visit 2 to Visit 3 | VITA Shade | DayWhite | 0.72 | 0.0089 |
| | | NiteWhite | -0.05 | 0.8493 |
| | 3D Master Bleachshade | DayWhite | 0.28 | 0.1304 |
| | | NiteWhite | -0.44 | 0.0188 |

Table 3: ΔE Within-Treatment (Longitudinal) Assessment

| Time Interval | Treatment | ΔE | | 95% CI | |
|---------------------|--------------------|------------|--------|--------|------|
| | | Mean | Median | L95 | U95 |
| Baseline to Visit 2 | Office Only | 4.50 | 4.40 | 3.48 | 5.47 |
| Baseline to Visit 3 | Office + DayWhite | 7.59 | 7.57 | 5.69 | 9.66 |
| | Office + NiteWhite | 5.05 | 4.98 | 3.26 | 5.77 |
| Visit 2 to Visit 3 | DayWhite | 4.00 | 3.99 | 2.06 | 5.09 |
| | NiteWhite | 2.48 | 2.20 | 0.83 | 4.74 |