



KULZER
MITSUI CHEMICALS GROUP

VENUS WHITE PRO STUDY

Venus White Pro is proven to whiten teeth up to 8.4 shades with virtually no sensitivity!*



The University of Texas

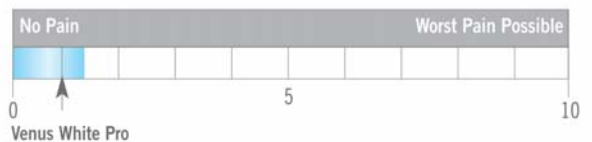
Venus White Pro Effectiveness Study Results

Shade Change Measurement, Canine

	At 2 Weeks	At 3 Weeks	At 4 Weeks
Shade Guide Units (Vita Classical)	8.4	8.0	8.0

Venus White Pro Sensitivity Study Results

Average sensitivity ratings below "2" representing virtually no sensitivity



*Study: J.C. Ontiveros, M.S. Eldiwany, W. Wang, M. Eldiwany, and R.D. Paravina, University of Texas - Houston/ Health Science Center, Houston, Tx. Results may vary.

Effectiveness and color rebound effect of a 22% carbamide peroxide

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Abstract

Objective: to evaluate the effectiveness and color rebound effect of a 22% carbamide peroxide (CP) at-home whitening system.

Methods: A total of 21 subjects were recruited for an at-home tooth whitening clinical study. Subjects were treated overnight for 2 weeks with 22% CP (Venus White Pro, Kulzer). Visual color measurement was performed by three color normal evaluators using the Vita Classical (VC) and the 3D Bleachedguide (BG). Instrumental color measurements were performed using an intraoral spectrophotometer (Vita Easyshade Compact). Color measurements were taken on a canine and central incisor at baseline, 2, 3, and 4 weeks. Wilcoxon matched-pair signed-rank test for group comparisons and Bonferroni correction was used to adjust for multiple testing at the 0.05 level of significance.

Results: Means (sd) for visual and instrumental whitening-dependent color changes are listed in the table; SGU=shade guide units, DE= total color change

	2 weeks minus baseline		3 weeks minus baseline		4 weeks minus baseline	
	Incisor	Canine	Incisor	Canine	Incisor	Canine
SGU(BG)	3.9(1.7)	5.8(2.1)	3.7(1.7)	5.6(2.3)	3.7(1.3)	5.4(2.2)
SGU(VC)	5.2(2.8)	8.4(3.5)	4.9(2.4)	8.0(3.5)	4.8(2.5)	8.0(3.5)
DE*(ES)	7.0(2.9)	10.2(4.7)	7.1(2.5)	9.1(4.8)	6.7(2.7)	9.9(4.2)

For visual shade evaluation with VC and BG, there was a statistically significant decrease in SGU from baseline and each subsequent week among all measurements, $p < 0.001$.

For instrumental measurements, there was no difference from week 2 to week 3 for canines and generally no difference between week 3 and week 4 in all parameters for incisors.

Conclusions: Visual and instrumental measurements evaluation showed clinical whitening-dependent rebound occurred 1 week post bleaching. In general, color stabilized at 2 weeks post bleaching.

Clinical Evaluation of Sensitivity Using 22% Carbamide Peroxide Gel

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Abstract

Objectives: To clinically evaluate the sensitivity of commercially available 22% carbamide peroxide with 3% potassium nitrate, at home bleaching system.

Methods: a total of 21 subjects with no history of previous tooth whitening and no tooth sensitivity were recruited for at-home whitening clinical study using Venus White Pro 22% carbamide peroxide (Kulzer). Subjects were treated nightly for 2 weeks with a maxillary custom tray. Sensitivity rating from 0-10 with zero representing no pain and 10 representing worst possible pain was documented at the initial appointment. Subjects were asked to document their sensitivity every morning for 14 days during treatment, and 14 days post bleaching. Wilcoxon matched-paired signed-rank test and Bonferroni correction for multiple comparisons were used at the 0.05 level of significance.

Results: Mean, standard deviation, and median sensitivity scores are as follows:

	Average week 1 sensitivity	Average week 2 sensitivity	Average week 3 sensitivity	Average week 4 sensitivity
Mean (SD)	1.2(1.2)	1.7(2.0)	0.2(0.4)	0.1(0.3)
Median	0.78	0.78	0	0
25%, 75% quantile	0.07, 2.14	0.07, 2.57	0, 0.07	0, 0

There was no statistically significant difference between week 1 and week 2 ($p=0.17$), or week 3 and week 4 ($p=0.19$). There was a statistically significant difference, between week 1 and week 3, week 1 and week 4, week 2 and week 3, week 2 and week 4; $p<0.01$, respectively.

Conclusions: Patients receiving nightly treatment with a commercially available 22% carbamide peroxide 3% potassium nitrate, at-home bleaching agent reported low sensitivity levels with a mean value of below 2 on a 0-10 scale.