Efficacy Variables

The primary efficacy variable was IOP. Diurnal IOP was measured at approximately 8 AM (before the morning drop), 10 AM, 3 PM (before the afternoon drop), and 5 PM at baseline, week 6, and at months 3, 6, and 12. The IOP was also measured at approximately 8 AM (before the morning drop) and 10 AM at week 2 and month 9.

Other efficacy variables included clinical success as evaluated by the investigator (regardless of whether a physician recommended continuation of study medication for the patient), subject satisfaction evaluation, and subject comfort evaluation using standardized scales.

Other measures that were evaluated included adverse events, visual acuity, cup/disc ratio, biomicroscopy, ophthalmoscopy, visual fields, heart rate, and systolic and diastolic blood pressure. The severity of adverse events was assessed based on the following guidelines: mild (awareness of sign or symptom, but easily tolerated), moderate (discomfort enough to cause interference with usual activity) and severe (incapacitating or unable to work or perform usual activities).

Statistical Analysis

The primary variables of analysis for efficacy were mean IOP and the mean change in IOP from baseline. These IOP data were analyzed using both the intent-to-treat with last observation carried forward and per-protocol populations. The per-protocol population consisted of observed cases. Only patients who met the protocol entry criteria, had no major protocol violations, received study medication, and had at least one follow-up visit were included in the per-protocol analysis, and only data from visits within specified time windows were included. Decisions for per-protocol exclusions were made before unmasking of the treatment groups for analysis. Safety data were analyzed using the intent-to-treat population. For comparison of treatment efficacy, both noninferiority and a two-sided paired t test for superiority were performed. Noninferiority criteria were set by the US Food and Drug Administration. Criteria were tested by constructing a two-sided 95% confidence interval for the between-group difference between experimental drug and brimonidine in mean IOP. If the upper limit of 95% confidence interval at all time points did not exceed 1.5 mm Hg, brimonidine-Purite was considered at least as effective as brimonidine.

Nominal categorical data such as sex and race were analyzed by the Cochran-Mantel-Haenszel method and continuous variables such as age and blood pressure were analyzed using a two-way analysis of variance with factors of treatment group and investigator site. Adverse events were analyzed using the Pearson χ^2 test or Fisher exact test. Ordinal categorical variables such as comfort and safety data were analyzed using the stratum (investigator site) adjusted Kruskal-Wallis and Wilcoxon rank-sum test.

RESULTS

Subject Demographics

The demographics and clinical characteristics of patients taking brimonidine-Purite 0.15% three times daily, brimonidine-Purite 0.2% three times daily, and brimonidine 0.2% three times daily are summarized in Table 1. No significant between-group differences were noted in baseline demographics, which included mean patient age, gender, race, and iris color.

Efficacy

Criteria for the per-protocol analysis were met by 97.9% (1,123 of 1,147) of patients (brimonidine-Purite 0.15%, 97.6% [372 of 381 patients]; brimonidine-Purite 0.2%, 97.9% [375 of 383 patients]; brimonidine 0.2%, 98.2% [376 of 383 patients]) and 92% of all data points were included with a similar distribution across the treatments. Twenty-four patients did not meet the entry criteria as defined in the study protocol and were excluded from the efficacy analysis. Other key reasons for patient data exclusions from the per-protocol analysis included use of excluded medications during the study, inappropriate instillation of study medications, and visits occurring outside of visit windows. There was no significant difference in the IOP results between the intent-to-treat and per-protocol analyses, and the per-protocol results are presented. The conclusions drawn from either intent-to-treat or per-protocol populations were the same.

Overall IOP Efficacy

At baseline, mean IOP was similar across the three treatment groups at each time point. Baseline mean IOP at 10 AM was 23.6 mm Hg (with an approximate SD of 3.2 mm Hg). Baseline mean IOP at 8 AM was 24.9 mm Hg (with an approximate SD of 2.7 mm Hg) (Fig. 1 and 2). Over the next 12 months, the difference in mean IOP at 10 AM (morning peak) (Fig. 1) and 8 AM (morning trough) (Fig. 2) between brimonidine-Purite 0.15% and brimonidine 0.2% was less than or equal to 0.4 mm Hg.

The mean IOP for each group was within 1 mm Hg of

TABLE 1. *Demographics and clinical characteristics of patients on brimonidine-Purite 0.15%, brimonidine-Purite 0.2%, and brimonidine 0.2%*

	Brimonidine-Purite 0.15% (n = 381)		Brimonidine-Purite 0.2% (n = 383)		Brimonidine 0.2% (n = 383)		Total (n = 1147)		
Variable	No.	(%)	No.	(%)	No.	(%)	No.	(%)	P
Age (years)									0.460
Mean	63.4		63.8		62.7		63.3		
SD	12.8		12.1		12.6		12.5		
Min	22.4		25.4		25.2		22.4		
Max	88.8		90.4		93.4		93.4		
Median	64.7		65.8		64.2		64.7		
Sex									0.845
Male	169	44.4%	162	42.3%	167	43.6%	498	43.4%	
Female	212	55.6%	221	57.7%	236	56.4%	649	56.6%	
Race									0.377
Caucasian	303	79.5%	298	77.8%	305	79.6%	906	79.0%	
Black	48	12.6%	59	15.4%	47	12.3%	154	13.4%	
Asian	2	0.5%	1	0.3%	3	0.8%	6	0.5%	
Hispanic	28	7.3%	23	6.0%	26	6.8%	77	6.7%	
Other	0	0.0%	2	0.5%	2	0.5%	4	0.3%	
Iris color									0.468
Blue	113	29.7%	108	28.2%	111	29.0%	332	28.9%	
Brown	179	47.0%	196	51.2%	183	47.8%	558	48.6%	
Green	23	6.0%	18	4.7%	18	4.7%	59	5.1%	
Hazel	59	15.5%	58	15.1%	68	17.8%	185	16.1%	
Other	7	1.8%	3	0.8%	3	0.8%	13	1.1%	

the mean IOP in the other groups at all visits and all time points, showing comparable IOP-lowering capabilities.

Brimonidine-Purite 0.15% Versus Brimonidine 0.2%

There were no statistically significant differences in diurnal mean IOP measurements between brimonidine-Purite 0.15% and brimonidine 0.2%, except at the 5-PM time point at month 3 (P = 0.046) where the mean IOP difference was 0.5 mm Hg in favor of brimonidine 0.2%. There were no statistically significant differences in the mean changes from baseline in diurnal IOP measurements, except for the 10-AM time point at week 2 (P = 0.015), the 5-PM time point at month 3 (P = 0.010), and the 5-PM time point at month 6 (P = 0.004). The mean

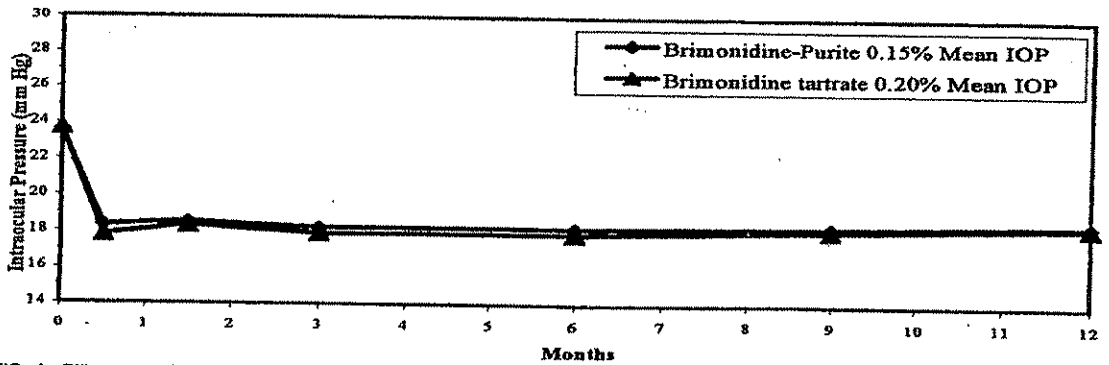

FIG. 1. Efficacy graph at 10 AM (peak) showing mean intraocular pressure of patients with glaucoma or ocular hypertension during 12-month treatment with brimonidine-Purite 0.15% and brimonidine 0.2% (Alphagan). The difference in mean intraocular pressure between the treatment groups was less than or equal to 0.4 mm Hg at all time points. All standard errors were less than 0.180.

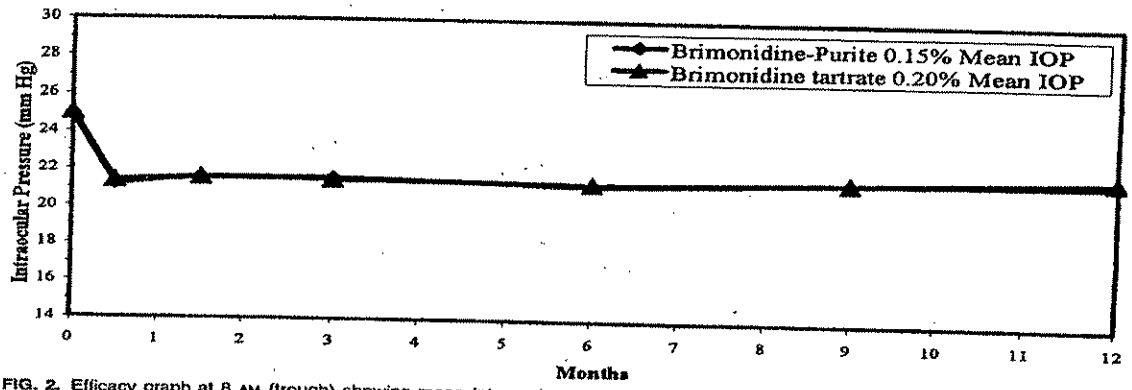

FIG. 2. Efficacy graph at 8 AM (trough) showing mean intraocular pressure of patients with glaucoma or ocular hypertension during 12-month treatment with brimonidine-Purite 0.15% and brimonidine 0.2% (Alphagan). All standard errors were less than 0.211.

change from baseline IOP difference was 0.6, 0.7, and 0.9 mm Hg, respectively favoring brimonidine 0.2%. The noninferiority criteria were satisfied because 40/40 of the upper limits of 95% confidence intervals were less than or equal to 1.5 mm Hg, with 36/40 less than or equal to 1.0 mm Hg (mean IOP and mean change from baseline IOP), showing that brimonidine-Purite 0.15% was comparable in efficacy with brimonidine 0.2%.

Brimonidine-Purite 0.15% Versus Brimonidine-Purite 0.2%

There were no statistically significant differences observed in mean IOP or mean changes from baseline in diurnal IOP measurements between brimonidine-Purite 0.15% and brimonidine-Purite 0.2%, except at the 5-PM time point at month 3 ($P = 0.027$, mean IOP), the 10-AM time point at month 9 ($P = 0.009$, mean IOP), and the 10-AM time point at month 12 ($P = 0.011$, mean IOP). The mean IOP difference was 0.6, 0.8, and 0.8 mm Hg, respectively, favoring brimonidine-Purite 0.2%. The noninferiority criteria were satisfied because 40/40 of the upper limits of 95% confidence intervals were less than or equal to 1.5 mm Hg, with 35/40 less than or equal to 1.0 mm Hg (mean IOP and mean changes from baseline IOP), showing that brimonidine-Purite 0.15% was comparable in efficacy with brimonidine-Purite 0.2%.

Brimonidine-Purite 0.2% Versus Brimonidine 0.2%

In the comparison of brimonidine-Purite 0.2% and brimonidine 0.2%, there were no statistically significant differences observed in mean IOP or mean changes from baseline in diurnal IOP measurements except for the 10-AM time point at month 9 ($P = 0.045$, mean IOP), the 10-AM time point at month 12 ($P = 0.018$, mean IOP), and the 5-PM time point at month 12 ($P = 0.041$, mean IOP). The average difference in mean IOP and mean changes from baseline in IOP difference was −0.6, −0.8, and −0.7 mm Hg, respectively, favoring brimonidine-Purite 0.2%. The only measurement favoring brimonidine 0.2% was at the 10-AM time point at month 6 (mean change from baseline IOP difference of 0.7 mm Hg, $P = 0.019$). The noninferiority criteria were satisfied because 40/40 of the upper limits of the 95% confidence intervals were less than or equal to 1.5 mm Hg, with 37/40 less than or equal to 1.0 mm Hg (mean IOP and mean changes from baseline IOP), showing that brimonidine-Purite 0.2% was comparable in efficacy with brimonidine 0.2%.

Safety

The following results were analyzed as intent-to-treat, and all data points were considered. Throughout the study, patients were monitored for signs and symptoms of adverse events (Table 2). Investigators rated the majority of adverse events as mild or moderate in severity. The overall frequency of treatment-related adverse events reported was fewer in the brimonidine-Purite 0.15% than with brimonidine-Purite 0.2% or brimonidine 0.2%. There was a lower incidence rate of allergic conjunctivitis, conjunctival hyperemia, and oral dryness favoring brimonidine-Purite 0.15% compared

TABLE 2. *Summary of treatment-related adverse events of patients with glaucoma or ocular hypertension during twelve-month treatment with brimonidine-Purite 0.15%, brimonidine-Purite 0.2%, and brimonidine 0.2% (among group P-values). The second P-value is a summary of possible, probable, and definite treatment-related adverse events in pairwise comparison of patients with glaucoma or ocular hypertension during twelve-month treatment with brimonidine-Purite 0.15 and brimonidine 0.2%*

Adverse event	Brimonidine-Purite 0.15% (n = 381) No. (%)	Brimonidine-Purite 0.2% (n = 383) No. (%)	Brimonidine 0.2% (n = 383) No. (%)	Amongst group P	Brimonidine-Purite 0.15 vs. brimonidine 0.2% P
Allergic conjunctivitis	35 (9.2%)	56 (14.6%)	60 (15.7%)	0.018	0.007
Oral dryness	20 (5.3%)	36 (9.4%)	40 (10.4%)	0.024	0.008
Conjunctival hyperemia	69 (18.2%)	81 (21.1%)	98 (25.6%)	0.043	0.013
Eye discharge	5 (1.3%)	7 (1.8%)	15 (3.9%)	0.043	0.025

with the treatment groups. There was only a 0.8% incidence of somnolence with brimonidine-Purite 0.15% compared with 2.6% in brimonidine-Purite 0.2% and brimonidine 0.2%. Although this difference did not meet statistical significance, because it is a rare adverse event it could be clinically relevant.

Table 2 also shows a direct comparison of the adverse events between the subjects on brimonidine-Purite 0.15% and brimonidine 0.2%. This pairwise comparison showed a statistically significant difference favoring brimonidine-Purite 0.15% ($P < 0.001$) in overall incidence of adverse events. Statistically significant lower incidences of conjunctival hyperemia, allergic conjunctivitis, and oral dryness were shown in the brimonidine-Purite 0.15% group ($P \leq 0.013$).

There were no statistical differences in the visual acuity, cup/disc ratio, visual fields, heart rate, and systolic and diastolic blood pressure.

Quality of Life

There were no statistical differences in the investigators' response to the clinical success of the medications. However, there were significant differences in how patients rated their satisfaction with their study medication at the time of exit from the study. The level of satisfaction was greater for patients using brimonidine-Purite 0.15% than those using brimonidine 0.2% ($P = 0.005$) (Fig. 2). Although less statistically significant, the level of satisfaction was greater for patients using brimonidine-Purite 0.2% than those using brimonidine 0.2% ($P = 0.020$). There was no statistical difference between the level of satisfaction of patients using brimonidine-Purite 0.15% compared with those using brimonidine-Purite 0.2%.

Throughout the year, more than 90% of all the treatment groups rated their study medications as comfortable, very comfortable, or soothing (Fig. 3). However, there were significant differences in how patients rated the comfort of their study medication at the time of exit from the study. Significantly more patients reported that brimonidine-Purite 0.15% was more comfortable than brimonidine 0.2% ($P = 0.042$). Furthermore, patients reported that brimonidine-Purite 0.2% was more comfortable than brimonidine 0.2% ($P = 0.027$). There was no statistical significance between the level of comfort of patients using brimonidine-Purite 0.15% compared with those using brimonidine-Purite 0.2%.

Patient Discontinuations

The most frequent reasons cited for discontinuation (in descending order) were adverse events, lack of efficacy, administrative issues, and protocol violations. Lack of efficacy was cited as the reason for discontinuation in only 5.3% of these patients in all 3 groups.

There were no statistical differences among the groups regarding adverse events that led to discontinuation from the study ($P = 0.203$). A smaller percentage of patients, however, discontinued therapy in the brimonidine-Purite

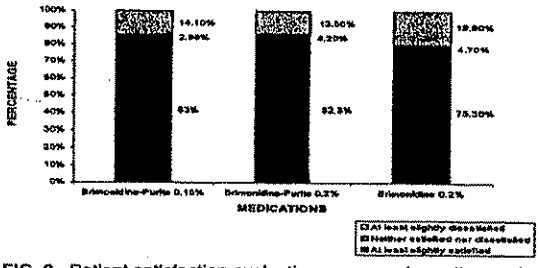

FIG. 3. Patient satisfaction evaluation summary for patients with glaucoma or ocular hypertension during 12-month treatment with brimonidine-Purite 0.15%, brimonidine-Purite 0.2%, and brimonidine 0.2%. The among-group P of 0.010 is a comparison of the seven-category response distributions for the three treatment groups. Patients rated the level of satisfaction with their study medication at the time of exit from the study. The pairwise comparison of brimonidine-Purite 0.15% versus brimonidine 0.2% yielded a P of 0.005, favoring brimonidine-Purite 0.15%.

0.15% (21.8%) group than in the brimonidine-Purite-0.2% (24.8%) or brimonidine-0.2% (27.4%) groups. The most common adverse events leading to discontinuation were conjunctival hyperemia, allergic conjunctivitis, and eye pruritus. Indeed, 5.1% fewer patients in brimonidine-Purite 0.15% cited allergic conjunctivitis as reason for discontinuation compared to brimonidine 0.2% (P = 0.017).

DISCUSSION

In this pooled analysis of two identically designed, 12-month, randomized, multisite, double-masked, parallel-group studies, brimonidine-Purite 0.15% and 0.2% provided IOP lowering comparable with brimonidine 0.2% in patients with glaucoma or ocular hypertension. Overall, the new 0.15% concentration of the brimonidine-Purite formulation showed IOP efficacy clinically comparable with brimonidine 0.2% throughout this 1-year study.

The formulations were applied three times daily in this study. The mean IOP at trough (8-AM measurement, before morning drop) of all 3 groups was comparable to the mean IOP at trough in previous studies where brimonidine 0.2% was administered twice daily[2–4] In an earlier study, application of brimonidine 0.2% three times daily and twice daily provided comparable IOP lowering at morning trough.[24] This finding suggests that brimonidine-Purite 0.15% would have comparable efficacy on morning IOP whether applied twice daily or three times daily; this hypothesis is being tested in an ongoing clinical trial.

Brimonidine 0.2%, which has been marketed since 1996, has shown a favorable adverse event profile, except for allergic conjunctivitis. The incidence of allergic conjunctivitis with brimonidine 0.2% has been reported to be 12.7% with twice-daily dosing.[4] In this present study, the incidence of allergic conjunctivitis was 15.7% for patients taking brimonidine 0.2% three times daily The higher incidence of allergic conjunctivitis is likely related to the increased frequency of dosing. It is interesting that the incidence of allergic conjunctivitis with patients on brimonidine-Purite 0.15% three times daily, which contains 25% less active ingredient of brimonidine, was only 9.2%. This incidence rate is less than the 12.7% incidence rate previously reported. This finding strongly suggests that with a twice-daily dosing of brimonidine-Purite 0.15%, the incidence of allergic conjunctivitis may be even lower than the 9.2% incidence with three-times-daily dosage regimen. Furthermore, it appears that the decreased concentration of brimonidine is primarily responsible for the decreased incidence of allergic conjunctivitis. The relative percent difference in allergic conjunctivitis during this current 1-year study was at least 41% less with brimonidine-Purite 0.15% than with brimonidine-Purite 0.2% or brimonidine 0.2%. Brimonidine-Purite 0.15% also had a significantly lower incidence of oral dryness than brimonidine 0.2%. Although not statistically significant, the lower incidence of somnolence with brimonidine-Purite 0.15% could prove to be beneficial. These findings suggest that brimonidine-Purite 0.15% has a superior adverse-events profile compared with brimonidine 0.2%.

In addition to having a comparable IOP-lowering effect to brimonidine 0.2% solution and a superior adverse event profile, reformulated brimonidine-Purite 0.15% appears to be better tolerated than brimonidine 0.2%. Brimonidine-Purite 0.15% had a significantly higher rate of satisfaction (P = 0.005) and comfort (P = 0.042) than the original formulation (Figs. 2 and 3). At the patients' last visit, more than 80% were satisfied with the reformulated brimonidine-Purite 0.15%, and 84.6% (P = 0.042) found it to be comfortable. The higher comfort experienced by those in the brimonidine-Purite groups should lead to improved compliance with the antiglaucoma regimen. The potentially enhanced ocular bioavailability associated with the reformulation may also explain why brimonidine-Purite 0.15% shows efficacy comparable with brimonidine 0.2% with a lower concentration of active drug (Fig. 4).

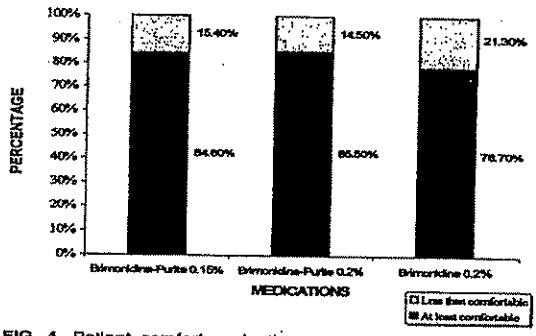

FIG. 4. Patient comfort evaluation summary for patients with glaucoma or ocular hypertension during 12-month treatment with brimonidine-Purite 0.15%, brimonidine-Purite 0.2%, and brimonidine 0.2%. The among-group P of 0.049 is a comparison of the six-category response distributions for the three treatment groups. Patients rated the level of satisfaction with their study medication at the time of exit from the study. The pairwise comparison of brimonidine-Purite 0.15% versus brimonidine 0.2% yielded a P of 0.042, favoring brimonidine-Purite 0.15%.

CONCLUSIONS

Brimonidine-Purite at concentrations of 0.15% or 0.2% effectively lowers IOP in patients with glaucoma or ocular hypertension. Brimonidine-Purite 0.15% also shows comparable efficacy with brimonidine 0.2% with less than a 1-mm Hg difference between study drugs at all time points throughout this study. The brimonidine-Purite 0.15% concentration showed a more favorable safety and tolerability profile with a 41% relative percent reduction in ocular allergy when compared with brimonidine 0.2%. The brimonidine-Purite 0.15% formulation received superior satisfaction and comfort ratings. Based on these clinical findings, it can be concluded that brimonidine-Purite 0.15% is an effective, safe, and well-tolerated therapy for the long-term treatment of high IOP.

APPENDIX

Members of the Brimonidine-Purite Study Groups 1 and 2 investigators include (in alphabetical order) Mark Abelson, MD, Edward Andersen, MD, Amy Batoosingh BA, Richard S. Bennion, MD, E. Randy Craven, MD, Harvey DuBiner, MD, Richard Evans, MD, Carlos Felix, MS, William C. Flynn, MD, Daniel Foreman, MD, Gary N. Foulks, MD, Stephen Gee, MD, L. Jay Katz, MD, Alex Kent, MD, Jeff Lozier, MD, Jeffrey Morris, MD, Thomas Mundorf, MD, Charles S. Ostrov, MD, Matthew Parsons, MD, Jay Perlman, MD, PhD, Michael J. Price, MD, Arnold Prywes, MD, Edward R. Rashid, MD, Patrick Riedel, MD, Elenora Safyan, BS, Kenneth Sall, MD, John Samples, MD, Thomas Samuelson, MD, Howard I. Schenker, MD, Gail Schwartz, MD, PA, John D. Sheppard, MD, Dong H. Shin, MD, PhD, Steven Simmons, MD, Dara Stevenson, MD, William C. Stewart, MD, Richard T. Sturm, MD, Lloyd Suter, MD, Stuart A. Terry, MD, Christopher M. Tortora, MD, Thomas R. Walters, MD, Mark Weiss, MD, Sidney Weiss, MD, Robert D. Williams, MD, Lisa Wohl, MD, SC, Eugene Barry Wolchok, MD, and Brandon Wool, MD.

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EXHIBIT F , TAB 8

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Serial No: 10/236,566	Examiner: Bennett, R.
Filed: September 6, 2002	
For: COMPOSITIONS CONTAINING ALPHA-2-AGONIST ADRENERGIC AGONIST COMPONENTS	

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Carlos A. Fisher (T2-7H)
Attorney of Record
ALLERGAN, INC.
2525 Dupont Drive
Irvine, CA 92612
Telephone: 714/246-4920
Fax: 714/246-4249

EXHIBIT F , TAB 9

DOCKET NO. 17361CON(AP)
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of Olejnik et al	Group Art Unit: 1615
Serial No: 10/236,566	Examiner: Bennett, R.
Filed: September 6, 2002	
For: COMPOSITIONS CONTAINING ALPHA-2-AGONIST ADRENERGIC AGONIST COMPONENTS	

Commissioner of Patents
Washington, D.C. 20231

TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE PATENTING REJECTION OVER BOTH AN ISSUED PATENT AND A PENDING PATENT APPLICATION

Dear Sir:

The owner, ALLERGAN SALES, LLC, successor by operation of law to Allergan Sales, Inc., of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 USC 154 and 156 and 173, as may be presently shortened by any terminal disclaimer, of 1) any patent issuing on co-pending United States Patent Application No. 09/904,018 and on 2) issued United States Patent 6,562,873. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it, any patent issuing from the above- identified patent application, and the above-identified patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

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01 FC:1814 110.00 CH

In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 USC 154 to 156 and 173 of either 1) any patent issuing from United States Patent Application No. 09/904,018, or 2) issued United States Patent 6,562,873 as presently shortened by any terminal disclaimer, in the event that one

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or both of the latter: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminal disclaimed under 37 CFR 1.321, has all claims cancelled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

The undersigned is an attorney of record.

Date: 5/19/03

By: _____
Carlos A. Fisher
Reg. No. 36,510

ALLERGAN SALES, LLC

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Please direct all future correspondence to:

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FROM: Carlos A. Fisher
2525 Dupont Drive
Irvine, California 92612

Phone No.: 714-246-4920
Facsimile No.: 714-246-4249

TO: Group 1615
R. Bennett
U.S. Patent & Trademark Office

Facsimile No.: 703-746-5315

*Number of pages (including this cover page): 3

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In re: Olejnik, et al.

Appln. No.: 10/236,566

Filed: September 6, 2002

Title: COMPOSITIONS CONTAINING ALPHA-2-AGONIST ADRENERGIC AGONIST COMPONENTS

Docket No. 17361CON(AP)

Date: May 19, 2003

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By: Bonnie Ferguson
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FROM: Carlos A. Fisher
2525 Dupont Drive
Irvine, California 92612

Phone No.: 714-246-4920
Facsimile No.: 714-246-4249

TO: Group 1615
R. Bennett
U.S. Patent & Trademark Office

Facsimile No.: 703-746-5315

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In re: Olejnik, et al.

Appln. No.: 10/236,566

Filed: September 6, 2002

Title: COMPOSITIONS CONTAINING ALPHA-2-AGONIST ADRENERGIC AGONIST COMPONENTS

Docket No. 17361CON(AP)

Date: May 19, 2003

Name or type of papers being transmitted:

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Date: 5/19/2003

By: Bonnie Ferguson

EXHIBIT F , TAB 10

Interview Summary	**Application No.** 10/236,566	**Applicant(s)** OLEJNIK ET AL.	
	Examiner Rachel M. Bennett	**Art Unit** 1615	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Rachel M. Bennett*. (3)_____.

(2) *Carlos Fisher*. (4)_____.

Date of Interview: *May 19 & 21, 2003*.

Type: a)☒ Telephonic b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant 2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes e)☒ No.
If Yes, brief description: _____.

Claim(s) discussed: *on record*.

Identification of prior art discussed: _____.

Agreement with respect to the claims f)☒ was reached. g)☐ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *The attorney of record and examiner agreed to cancel claims 52 and 62. Claims 47 and 57 would be amended to "about" 21 deg C. Support for the amendment is found on page 30, line 22 of the specification*.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Rachel M. Bennett
Examiner's signature, if required

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

mmary of Record of Interview Requireme

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.