

IN THE MATTER OF
NOVARTIS CORPORATION, ET AL.

FINAL ORDER, ETC., IN REGARD TO ALLEGED VIOLATION OF
SECS. 5 AND 12 OF THE FEDERAL TRADE COMMISSION ACT

Docket 9279. Complaint, June 21, 1996—Final Order, May 13, 1999

This final order, among other things, prohibits Novartis Corporation and Novartis Consumer Health, Inc., successors-in-interest to Ciba-Geigy Corporation and Ciba Self Medication, Inc., and the marketers of Doan's Pills, from representing that any over-the-counter analgesic drug is more effective than other over-the-counter analgesic drugs unless they possess and rely upon competent and reliable scientific evidence that substantiates their claims. In addition, the order requires the respondents to include a corrective notice in certain of Doan's advertisements, and to possess and rely upon competent and reliable scientific evidence as substantiation for any claims regarding the efficacy, safety, benefits or performance of any over-the-counter analgesic they market.

Participants

For the Commission: *Theodore Hoppock, Michael Ostheimer, Kevin Bank, Lynne Colbert, C. Lee Peeler, and Susan Braman.*

For the respondents: *Michael Denger, Boyd Johnson and Phillip Rudolph, Gibson, Dunn & Crutcher, Washington, D.C.*

COMPLAINT

The Federal Trade Commission, having reason to believe that Ciba-Geigy Corporation, and CIBA Self-Medication, Inc., corporations ("respondents"), have violated the provisions of the Federal Trade Commission Act, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, alleges:

PARAGRAPH 1. Respondent Ciba-Geigy Corporation ("Ciba-Geigy") is a New York corporation with its principal office or place of business at 444 Saw Mill River Road, Ardsley, New York.

Respondent CIBA Self-Medication, Inc. ("CIBA Self-Medication"), is a Delaware corporation with its principal office or place of business at 581 Main Street, Woodbridge, New Jersey. CIBA Self-Medication is a wholly-owned subsidiary of Ciba-Geigy.

PAR. 2. Respondents have manufactured, labeled, advertised, offered for sale, sold, and distributed drug products, including Doan's analgesic products, to the public. Doan's analgesic products are

"drugs" within the meaning of Sections 12 and 15 of the Federal Trade Commission Act.

PAR. 3. CIBA-Geigy acquired the Doan's analgesic product line in 1987. Between 1987 and 1994, Ciba-Geigy advertised and sold Doan's analgesic products through its CIBA Consumer Pharmaceuticals division. CIBA Self-Medication was incorporated in December 1994, at which time Ciba-Geigy transferred the assets of CIBA Consumer Pharmaceuticals to CIBA Self-Medication. Since December 1994, CIBA Self-Medication has advertised and sold Doan's analgesic products.

PAR. 4. The acts and practices of respondents alleged in this complaint have been in or affecting commerce, as "commerce" is defined in Section 4 of the Federal Trade Commission Act.

PAR. 5. Respondents have disseminated or caused to be disseminated advertisements for Doan's analgesic products, including, but not necessarily limited to, the attached Exhibits A-I. Respondents have disseminated these or substantially similar advertisements for at least eight years. These advertisements contain the following statements and depictions:

A. Doctors measure back pain by how far you can bend. Extra Strength Doan's is made for back pain relief with an ingredient these pain relievers don't have. *[Depiction of large package of Doan's in front of smaller packages of Bayer, Advil and Tylenol]* Doan's makes back pain go away. Extra Strength Doan's. The Back Specialist. *[Superscript: The back specialist]*
[Exhibit A: "Graph" 15-Second Television]

B. Lower back pain. Neck pain. Upper back pain. There are all kinds of back pain. Doan's relieves them all. With a special ingredient these brands don't have. *[Depiction of large package of Doan's in front of smaller packages of Bayer, Advil and Tylenol]*. Relieve back pain with Doan's, the Back Specialist. *[Superscript: The Back Specialist.]*
[Exhibit B: "Black & White Back" 15-Second Television]

C. Now. Back pain doesn't have to ruin another night's sleep. Introducing new Doan's P.M. Doan's starts with a unique pain reliever these brands don't have; *[Depiction of large package of Doan's P.M. and smaller packages of Tylenol, Bayer and Advil]* *[Superscript: Magnesium Salicylate]* then adds a second ingredient to help you sleep. New Doan's P.M. For nighttime back pain. *[Superscript: For Nighttime Back Pain]*
[Exhibit C: "Ruin A Night's Sleep" 15-Second Television]

D. If nothing seems to help, try Doan's. It relieves back pain no matter where it hurts. Doan's has an ingredient these pain relievers don't have. *[Depiction of large package of Doan's in front of smaller packages of Bayer, Aleve, Advil and*

Tylenol] *[Superscript: Magnesium Salicylate]*. Doan's. The back Specialist. *[Superscript: The Back Specialist]*

[Exhibit D: "Activity - Pets" 15-Second Television]

E. There are hundreds of muscles in the back. Any one can put you in agony. That's when you need Doan's. *[Depiction of Doan's package on top of packages of Tylenol, Bayer, Aleve and Advil]*. Doan's has an ingredient the leading brands don't. It relieves back pain no matter where it hurts. There are hundreds of muscles in the back. *[Superscript: The Back Specialist]* Doan's relieves them all.

[Exhibit E: "Muscles" 15-Second Television]

F. Doan's. Made for back pain relief. With an ingredient these other pain relievers don't have. *[Depiction of packages of Bayer, Tylenol, and Advil]*.

[Exhibit F: Print Advertisement]

G. Back pain is different. Why use these pain relievers? *[Depiction of packages of Tylenol, Motrin, and Advil]* Doan's is just for back pain.

[Exhibit G: Print Advertisement]

H. BACK PAIN SUFFERERS[:] IT'S EASY TO SEE WHY YOU NEED DOAN'S. These are for all kinds of aches and pains. *[Depiction of packages of Tylenol, Bayer, Motrin, and Advil, with a magnifying glass on the Tylenol package emphasizing Tylenol's labeling indications for use for "the temporary relief of minor aches, pains, headaches and fever."]* Doan's is just for back pain.

[Exhibit H: Print Advertisement]

I. WHY TREAT GENERAL ACHES? *[Depiction of packages of Bayer, Tylenol, Advil, and Aleve]*.

BACK PAIN NEEDS THE SPECIALIST *[Depiction of packages of Regular Strength Doan's, Extra Strength Doan's, and Extra Strength Doan's P.M.]*.

DOAN'S. WITH A UNIQUE INGREDIENT THE OTHERS DON'T HAVE.

[Exhibit I: Print Advertisement]

PAR. 6. Through the use of the statements and depictions contained in the advertisements referred to in paragraph five, including but not necessarily limited to the advertisements attached as Exhibits A-I, respondents have represented, directly or by implication, that Doan's analgesic products are more effective than other analgesics, including Bayer, Advil, Tylenol, Aleve, and Motrin, for relieving back pain.

PAR. 7. Through the use of the statements and depictions contained in the advertisements referred to in paragraph five, including, but not necessarily limited to, the advertisements attached as Exhibits A-I, respondents have represented, directly or by implication, that at the time they made the representation set forth in paragraph six, respondents possessed and relied upon a reasonable basis that substantiated such representation.

PAR. 8. In truth and in fact, at the time they made the representation set forth in paragraph six, respondents did not possess and rely upon a reasonable basis that substantiated such representation. Therefore, the representation set forth in paragraph seven was, and is, false and misleading.

PAR. 9. The acts and practices of respondents as alleged in this complaint constitute unfair or deceptive acts or practices and the making of false advertisements in or affecting commerce in violation of Sections 5 and 12 of the Federal Trade Commission Act.

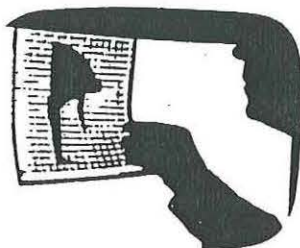
Commissioner Azcuenaga dissenting.

Complaint

127 F.T.C.

EXHIBIT A

Doan's[®] The Back Specialist.



Doctors measure back pain



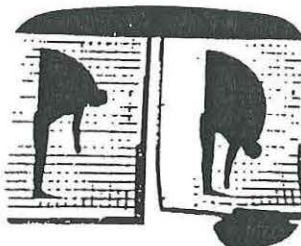
by how far you can bend.



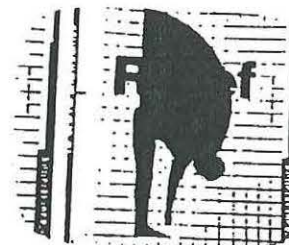
Extra Strength Doan's is made for back pain relief



with an ingredient these pain relievers don't have.



Doan's makes back pain



go away.

Extra Strength Doan's.
The Back Specialist.

030135

EXHIBIT A

580

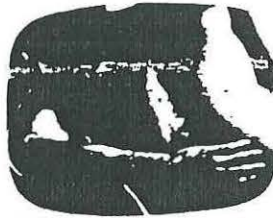
Complaint

EXHIBIT B

Doan's. The Back Specialist.
Relieves all kinds of back pain.



Lower back pain.



(SFX)



Neck Pain.



(SFX)



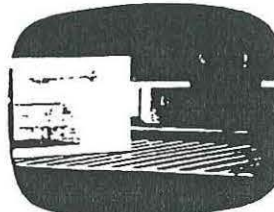
Upper back pain.



There are all kinds of back pain.



(Music) Doan's relieves them all.



With a special ingredient these brands don't have.



Relieve back pain with



Doan's, the Back Specialist.

EXHIBIT B

030136

Complaint

127 F.T.C.

EXHIBIT C

Ruin A Night's Sleep

DOAN'S P.M. RELIEVES BACK PAIN
AND HELPS YOU SLEEP

Now, Back pain doesn't have

to ruin another night's sleep.



Introducing new Doan's P.M.

Doan's starts with a unique
pain reliever

these brands don't have

then adds a second ingredient
to help you sleep.New Doan's P.M. For nighttime
back pain.

EXHIBIT C

030187

580

Complaint

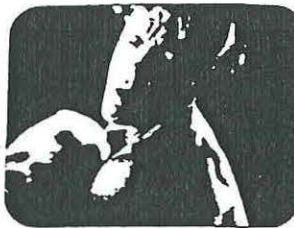
EXHIBIT D

DOAN'S

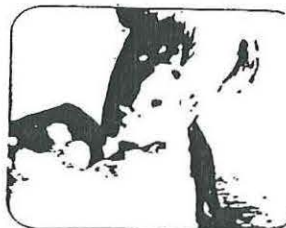
"ACTIVITY-PETS":15 TV



ANNCR: (VO) He's your best friend...



and he's also



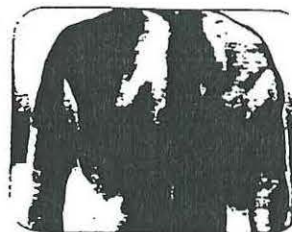
killing your back.



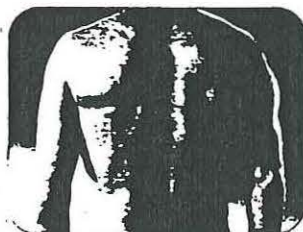
If nothing seems to help,



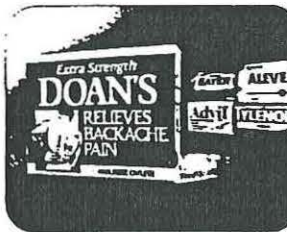
try Doan's.



It relieves back pain



no matter where it hurts.



Doan's has an ingredient these pain relievers don't have.



Doan's. The Back Specialist.

EXHIBIT D

© 1994 CIBA Consumer Pharmaceuticals

020002

Agency: Jordan, McGraw, Case & Taylor Inc.

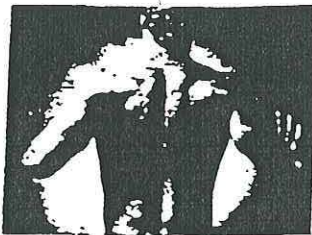
Complaint

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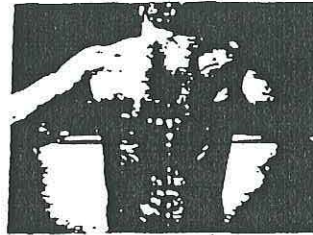
EXHIBIT E

DOAN'S

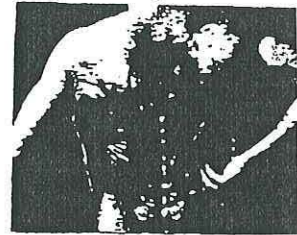
"Muscles - Male 15 TV



AVO: There are hundreds of



muscles in the back



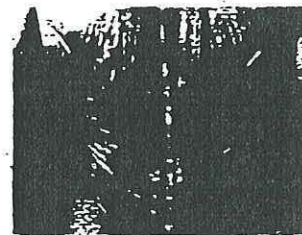
Any one can put you in agony



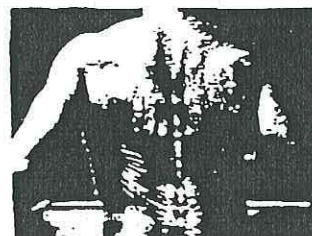
That's when you need Doan's.



Doan's has an ingredient the leading brands don't



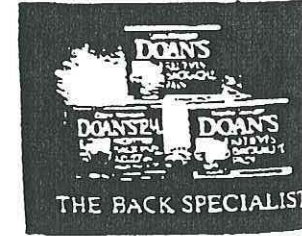
It relieves back pain



no matter where it hurts.



There are hundreds of muscles in the back.



Doan's relieves them all

EXHIBIT E

Agency: Jordan, McGrath, Case & Taylor, Inc.

© 1998 DBA Set

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Complaint

EXHIBIT F

Doan's. Made for back pain relief.

EXTRA STRENGTH



Doan's
RELIEVES
BACKACHE
PAIN

With an ingredient these other
pain relievers don't have.

Advil



SAVE 50¢
On Extra Strength Doan's

Doan's
RELIEVES
BACKACHE
PAIN

76680 10225

SAVE 50¢
On Regular Strength Doan's

Doan's
RELIEVES
BACKACHE
PAIN

76680 10225

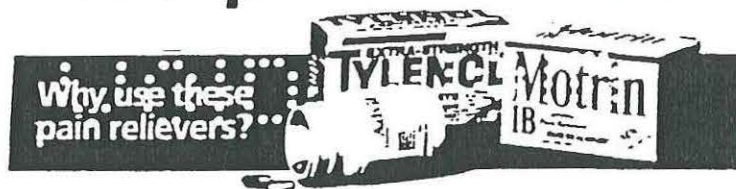
EXHIBIT F

13017

53640-00 10-14 90

EXHIBIT G

Back pain is different.



Use only as directed.

**Doan's is just
for back pain.**

**TRY DOAN'S FREE!
CALL 1-800-35-BACK-1**

for a free sample of Extra Strength Doan's and valuable coupon for a future purchase. If you already use Doan's we'll send you a \$1.00 coupon for your next purchase. Offer expires 6/16/91.

EXHIBIT G

BACK PAIN SUFFERERS

**IT'S EASY...
TO SEE WHY YOU
NEED DOAN'S.**

LEVER **Advil**
Extra Strength Tylenol
acetaminophen CAPLETS
For the temporary
relief of minor aches,
pains, headaches
and fever

TYLENOL **Motrin**

These are for
all kinds of
aches and pains.

**EXTRA STRENGTH
Doan's**
RELIEVES
BACKACHE
PAIN
ANALGESIC CAPLETS

Doan's is just for back pain.

Use only as directed.

Tell us how Doan's is different and save \$2.00. Answer these questions before you redeem this coupon to validate the savings. COUPON NOT VALID UNLESS THIS SECTION IS COMPLETE.

1. For what kind of pain is Doan's prescribed?
2. For what kind of pain is Doan's prescribed?
3. Have you used Doan's during the last 6 months?

SAVE \$2.00
On Regular or
Extra Strength Doan's

300202
00083

EXHIBIT H

Complaint

127 F.T.C.

EXHIBIT I

WHY TREAT GENERAL ACHES?

DOAN'S **TYLENOL** **Advil** **ALIVE**

BACK PAIN NEEDS THE SPECIALIST

Regular Strength DOAN'S
RELIEVES BACKACHE PAIN
ANALGESIC CAPLETS

Extra Strength DOAN'S
RELIEVES BACKACHE PAIN
ANALGESIC CAPLETS

Extra Strength DOAN'S P.M.
NIGHTTIME BACK PAIN RELIEF and HELPS YOU SLEEP

SAVE 75¢ ON ANY SIZE DOAN'S

DOAN'S P.M.
RELIEVES BACKACHE PAIN

DOAN'S
RELIEVES BACKACHE PAIN

WITH A FORMULA FOR EVERY BACK PAIN SUFFERER

DOAN'S. WITH A UNIQUE INGREDIENT THE OTHERS DON'T HAVE.

302263

00083 11075

EXHIBIT I

DISSENTING STATEMENT OF COMMISSIONER MARY L. AZCUENAGA

Although I have reason to believe that the respondents have violated Section 5 of the Federal Trade Commission Act as alleged in the complaint, I dissent on the ground that, because the case could have been settled on satisfactory terms, it is not in the public interest to litigate.

INITIAL DECISION

BY LEWIS F. PARKER, ADMINISTRATIVE LAW JUDGE
MARCH 9, 1998

I. INTRODUCTION

On June 21, 1996, the Commission issued its complaint in this proceeding charging that Ciba-Geigy Corporation and Ciba Self-Medication, Inc., now Novartis Corp. and Novartis Consumer Health, Inc. ("Novartis" or respondents), successors-in-interest to Ciba-Geigy and Ciba Self-Medication (*see* order dated April 23, 1997), violated Section 5 of the Federal Trade Commission Act.

Novartis manufactures, advertises and sells Doan's analgesic products. The complaint alleges that Novartis has represented, directly or by implication, that these products are more effective than other analgesics, including Bayer, Advil, Tylenol, Aleve, and Motrin, for relieving back pain.

The complaint further charges that Novartis has, by the use of several ads, falsely represented, directly or by implication, that at the time it made its effectiveness claims, it possessed and relied upon a reasonable basis that substantiated them.

After extensive pretrial discovery, trial was held in Washington, D.C. The record was closed on December 5, 1997 and the parties filed their proposed findings on December 19, 1997. Replies were filed on January 16, 1998.

This decision is based on the transcript of testimony, the exhibits which I received in evidence, and the proposed findings of fact and conclusions of law, and answers thereto, filed by the parties. I have adopted several proposed findings verbatim. Others have been adopted in substance. All other findings are rejected either because they are not supported by the record or because they are irrelevant.

II. FINDINGS OF FACT

A. Novartis

1. Respondent Novartis is a corporation organized, existing and doing business under and by virtue of the laws of the State of New York, with its offices and principal place of business located at 556 Morris Avenue, Summit, New Jersey. Respondent Novartis Consumer Health, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of Delaware, with its offices and principal place of business located at 560 Morris Avenue, Summit, New Jersey. Novartis Consumer Health, Inc., is a subsidiary of Novartis Corporation. (*See* Ans ¶ 1; JX 2 ¶ 11.)¹

2. Novartis and Novartis Consumer Health, Inc., (hereinafter, individually and collectively referred to as "Novartis") are successors-in-interest to, respectively, Ciba-Geigy Corporation and Ciba Self-Medication, Inc. (hereinafter individually, and collectively referred to as "Ciba") (JX 2 ¶ 11).

3. On April 23, 1997, upon agreement of the parties, Novartis was substituted for Ciba as respondent in this proceeding. (Order dated March 23, 1997.)

4. Novartis is a subsidiary of Novartis AG, a corporation organized, existing, and doing business under and by virtue of the laws of Switzerland with its office and principal place of business located at Centralbahnstrasse 7, CH-4010 Basel, Switzerland. (*Ciba-Geigy Limited*, Dkt. C-3725 (March 24, 1997).)

5. Novartis manufactures and sells many over-the-counter ("OTC") products in addition to Doan's, including such well known brands as Ascriptin, Ciba Vision, Desenex, Dulcolax, ExLax, Gas-X, Habitrol, Maalox, Sunkist Vitamin C, Tavist-D, Theraflu, and Triaminic. (*See, e.g.,* CX 401-A; CX 385-Z-36-39.)

6. From January 1987 to December 1994, Ciba-Geigy Corporation was responsible for the marketing and advertising of Doan's analgesic products ("Doan's"). In December 1994, Ciba transferred the Doan's line of products to Ciba Self Medication ("CSM"), a wholly-owned subsidiary. CSM was responsible for the marketing

¹ Abbreviations used in this decision are:

Cplt: Complaint

Ans: Answer

CPF: Complaint Counsel's proposed findings

RPF: Respondents' proposed findings

CX: Commission Exhibit

RX: Respondents' Exhibit

JX: Joint Exhibit

Tr.: Transcript of the proceeding

F: Finding of fact

and advertising of Doan's products from December 1994 to March 24, 1997 (JX 2 ¶ 13). For purposes of the Federal Trade Commission Act, 15 U.S.C. 52, Doan's analgesic products are "drugs" as defined in Section 15 of the Act, 15 U.S.C. 55 (Ans ¶ 2; JX 2 ¶ 14).

7. At all relevant times, the acts and practices of Novartis challenged in the complaint have been in or affecting commerce (Ans ¶ 4; JX 2 ¶ 15).

B. Doan's

8. Doan's has been sold in this country for over 90 years and has always been advertised (or "positioned") for the relief of back pain (Peabody Tr. 285-87) (Mr. Peabody is the Director of Marketing Research at Novartis Consumer Health, Inc.).

9. Ciba purchased the Doan's brand in early 1987 from DEP Corporation, which had shortly before acquired the brand from Jeffrey Martin, Inc. (JX 2 ¶ 12; CX 455-A; CX 500 at 19-20 [Russo Dep.]).

10. Ciba purchased the Doan's brand for approximately \$35 million (CX 500 at 21-33 [Russo Dep.]) because it believed that Doan's was a brand name with a high level of awareness and potential for expanding sales (CX 501 at 24 [Sloan Dep.]). At that time, Ciba believed that Doan's did not have much of a brand image and was viewed as dated and old fashioned. This view was confirmed by consumer research that Ciba had conducted shortly after acquiring the brand (Peabody Tr. 285).

11. In 1986, before Ciba purchased the Doan's brand, Jeffrey Martin, Inc., was disseminating three different 30-second television commercials for Doan's: "Hollingshead," "Schwartz" (CX 431), and "Drake" (CX 432) (CX 508-Z-2). The creative strategy for these ads was that Doan's "relieves minor muscular back pain." The ads featured hidden camera testimonials with individuals explaining how they got relief from Doan's pills. (*See id.* at Z-2-3; CX 431; CX 432; Mazis Tr. 942-45.)

12. Until late 1987, the only Doan's analgesic product sold was named "Doan's." In the fourth quarter of 1987, Ciba introduced Extra Strength Doan's, containing a larger dose of the active ingredient. The original product was renamed "Regular Strength Doan's." (*See* Peabody Tr. 584-85; JX 2 ¶ 18; CX 455-B.) In September 1991, Ciba

introduced Doan's P.M., which contains a sleep aid (JX 2 ¶ 18; CX 455-B).

13. Regular Strength Doan's is available in 24 pill or "count" packages, Extra Strength Doan's is available in 24 count and 48 count packages, and Doan's P.M. is available in 20 count packages (CX 455-J).

14. The active analgesic ingredient in Doan's products is magnesium salicylate (JX 1 ¶ 1). Regular Strength Doan's contains 325 mg of magnesium salicylate and Extra Strength Doan's contains 467 mg of magnesium salicylate (CX 455-B). Doan's P.M. contains 500 mg of magnesium salicylate, as well as 25 mg of diphenhydramine, a sleep aid (CX 368-D; CX 455-B). The recommended dosage for all three Doan's products is two tablets (CX 497 at 40 [Esayian Dep.]; *see also* CX 510-Z-24).

15. Doan's analgesic products are sold at a price premium over general purpose analgesic products (CX 402-F; CX 496 at 23-24 [Caputo Dep.]). This is true for both Doan's factory prices (*i.e.*, the price paid by retailers) and retail prices. (*See* Peabody Tr. 331, 550-52; CX 360-Z-38; CX 497 at 173 [Esayian Dep.].) In 1992, the retail price of a 24 count package of Doan's Regular Strength tablets was \$4.32, while 24 count packages of regular strength Tylenol and Bayer tablets sold for \$2.61 and \$2.57, respectively, constituting price premiums of 66% and 68%. (*See* CX 360-Z-38; CX 402-F.)

16. Doan's is more expensive relative to other OTC analgesics on a per pill basis (CX 402-F). The largest size packages of Doan's available, depending on the particular version, are 20, 24, or 48 count packages, whereas general analgesics are sold in substantially larger, more economical packages. (*See* CX 368-D-I; CX 402-F; CX 455-J; Peabody Tr. 551.) In 1995, a 24 count package of Doan's Regular Strength cost \$.18 per pill, while in 100 count packages, Regular Strength Tylenol cost \$.06 per pill, Advil cost \$.08 per pill, and private label aspirin cost \$.03 per pill (CX 402-F). On this basis, Doan's was sold at a 200% premium over Tylenol and a 500% premium over private label aspirin. With respect to Advil, the recommended dose is only one pill, while the recommended dose of Doan's is two pills. Accordingly, one dose of Doan's cost \$.35 versus \$.08 for Advil, a premium of over 300%. Doan's premium price may have been a barrier to increased brand usage (CX 501, pp. 89-90; CX 454-C), so Ciba's strategy for marketing it was to "use back pain

specific/special ingredient strategy to justify price premium" (CX 351-Z-27).

C. Doan's And The FDA

17. Product labeling for magnesium salicylate, the active ingredient in Doan's analgesic products, is regulated by the Food and Drug Administration ("FDA"). *Tentative Final Monograph on Internal Analgesic, Antipyretic, Antirheumatic Products for Over-the-Counter Human Use* (53 Fed. Reg. 46,204, Nov. 16, 1988) ("Monograph") (JX 1 ¶ 1).

18. Under the Monograph, an OTC analgesic drug product may be labeled as indicated for the temporary relief of minor aches and pain associated with one or more of the following: a cold, the common cold, sore throat, headache, toothache, muscular aches, backache, premenstrual or menstrual periods or cramps, and arthritis. 53 Fed. Reg. at 46,209. (JX 1-B ¶ 5.)

19. In 1988, when it promulgated the Monograph, the FDA was aware of comments expressing the concern that pain-specific labeling would suggest to consumers that "one product offers unique advantages over another for the specific indications stated on the label" (RX 88.1-Z-7). Despite this view, the FDA permitted pain-specific labeling as an alternative labeling option, concluding that such labeling "May be helpful to consumers to provide them with examples of the general types of pain for which OTC internal analgesic products are useful" (JX 1-B ¶ 5). Many OTC analgesic brands have positioned themselves for or advertised their efficacy for specific indications, such as headaches, arthritis, or back pain relief (RX 60-A-Z). Doan's specific positioning as a back pain reliever is consistent with the Monograph (JX 1-B ¶ 5; RX 88; RX 88.1) although it has not been FDA approved. (See CX 114-A; CX 500 at pp 14, 74-76.)

20. Although the Monograph states that magnesium salicylate is effective for pain relief for several ailments, the only indication for which Novartis has marketed Doan's has been for the relief of back pain (CX 501 at 20 [Sloan Dep.]). The manufacturers of Advil, Aleve, Bayer, Motrin, and Tylenol label their products as providing relief from pain associated with several different problems. (See Peabody Tr. 557; see, e.g., RX 114.)

21. The Monograph does not state that any approved analgesic ingredient is more effective for the relief of back pain than any other approved ingredient (CX 415-A-Z-31) and it does not sanction a company's labeling or advertising of its analgesic product as being more effective for back pain (*id.*; see also Peabody Tr. 588-89; Scheffman Tr. 2643-44).

22. No other brand of OTC analgesic contains magnesium salicylate as its active ingredient (Peabody Tr. 314), but there are no studies demonstrating that it relieves back pain more effectively than acetaminophen, aspirin, ibuprofen or naproxen sodium (CX 584; JX 1 ¶ 9).

D. The Dissemination of Doan's Ads

23. The challenged ads were disseminated in a long-running national ad campaign beginning in May 1988, and continuing through May 1996 (JX 2 ¶¶ 25, 35, 36).

24. Ciba's ad efforts for Doan's products used national television ads and free-standing inserts ("FSI's") and, at times, radio ads disseminated in selected markets (JX 2 ¶¶ 25, 28, 29, 33-36). FSI's are ads appearing in Sunday newspaper supplements with, in some cases, attached discount coupons. FSI's are primarily used by "coupon clippers." During the relevant period Doan's FSI's were redeemed by less than 1% of newspaper subscribers (RX 160-A; Peabody Tr. 486).

25. Over the period 1988 through 1996, Ciba's broadcast ad expenditures for Doan's products totaled approximately \$55 million, and its consumer promotion spending for Doan's (including FSI production and dissemination and merchandising materials) totaled about \$10 million (JX 2 ¶ 21).

26. The target audience for Doan's ads was backache sufferers who treat their back pain with OTC pain relievers ("sufferers/treaters") within specified age ranges that varied over time (JX 2 ¶ 27). The goals of Ciba's ad and promotion campaign were to maintain the loyalty of existing Doan's users, encourage Doan's users to increase their usage of Doan's pills for treating their backaches, regain lapsed Doan's users, and attract new users who had been using other OTC pain relievers to treat their back pain or who were new to the analgesics market. (See, e.g., Peabody Tr. 150; Stewart Tr. 3608; CX 360-Z-43; CX 455-I; CX 508-O.)

1. Television Ads

27. Between January 1987 and June 1996, Doan's television ads were disseminated nationally both on network television during daytime and late night hours, as well as on syndicated and cable television during prime time, early evening, weekend, daytime and late night. (See JX 2 ¶ 28; CX 370-A-Z-78; CX 371-A-Z-39; Stewart Tr. 3418-19, 3440.) They appeared during such popular television shows as One Life to Live, The Young and the Restless, General Hospital, Family Feud, Jeopardy, Wheel of Fortune, Cops, Inside Edition, Current Affair, Oprah Winfrey, Rush Limbaugh, and, in 1989, during prime time newscasts (JX 2 ¶ 29; CX 370-A-Z-78). Doan's television commercials appeared on cable stations such as the Cable News Network, Nashville Network, USA Network, Turner Network Television, Turner Broadcasting Service, Weather Channel, and Lifetime (JX 2 ¶ 29). It also bought time on cable television programs with high Southern viewership, such as "Country News Late," "Texas Connection," "Western Block," and "Truck and Tractor" (CX 371-A-Z-79; Stewart Tr. 3438-39).

28. The advertising agencies Hicks & Greist and Ketchum Advertising participated in the creative development, production, and media dissemination of Doan's television commercials from 1987 to April 1993. Jordan, McGrath, Case & Taylor, Inc. ("Jordan McGrath"), another advertising agency, participated in the creative development, production, and media dissemination of Doan's television commercials from April 1993 to June 1996. Ciba gave final approval for all advertising copy and dissemination (JX 2 ¶ 26).

29. The television ads disseminated by Ciba were 15-second spots (JX 2 ¶ 25). According to Jordan McGrath, the rationale for using 15-second ads is that they provide maximum efficiency, afford continuity and build frequency (CX 390-S; *see also* CX 503 at 110-11 [Jackson Dep.]). Ciba's one-time Marketing Director for Doan's testified that 15-second ads are an effective way of advertising the product, because Doan's television commercials had a fairly singular communication point that could be easily made in 15 seconds (CX 499 at 135 [Nagy Dep.]). Doan's competitors apparently disagree, for more than 80% of TV commercials for Tylenol, Advil, Motrin and Aleve were 30 seconds in length or longer in 1984 (JX 2-H ¶ 31; RX 36-Z-27).

30. For purposes of efficiently purchasing air time for Doan's television commercials, Ciba defined the Doan's target market in terms of the age demographics it believed best described potential Doan's purchasers. From 1988 to 1990, the age demographics of the target audience for Doan's television commercials were adults 35 years of age or older. From 1991 to 1996, the age demographics of the target audience for Doan's television commercials were adults 25 to 54 years of age (JX 2 ¶ 27; Stewart Tr. 3431).

31. Based on estimates by Ciba's ad agencies, from 1988 to 1996 television commercials for Doan's reached 80% to 90% of the Doan's target audience, on average, 20 to 27 times per year (JX 2 ¶ 28).

32. The first ads disseminated by Ciba for Doan's were 15-second versions of the "Hollingshead" and "Schwartz" television commercials developed by Doan's prior owner, Jeffrey Martin, Inc. These ads were disseminated from January 1987 through February 1988. After it introduced Extra-Strength Doan's, Ciba modified these ads by adding tag lines announcing the Extra-Strength product. These revised "Hollingshead" and "Schwartz" (CX 2) ads aired from February through May 1988 (JX 2 ¶ 25; *see also* Mazis Tr. 947; CX 500 at 57-58 [Russo Dep.]; Peabody Tr. 161, 605-607).

33. The first television commercial created by Ciba, "Graph" (CX 2; CX 13), was disseminated from May 1988 through June 1991. A television ad known alternatively as "X-Ray" or "Acetate" (CX 14), which was a variation of the "Graph" ad, was disseminated concurrently with "Graph" from August 1989 through June 1991 (JX 2 ¶ 25).

34. The "Black & White Back" television ad (CX 15) was disseminated from June 1991 through October 1992. A variation of the "Black & White Back" ad known as "Black & White Pan" (CX 7; CX 16) was disseminated from December 1992 through June 1994 (JX 2 ¶ 25).

35. The "Ruin A Night's Sleep" television ad (CX 7; CX 17) was disseminated from January 1992 through August 1992. Subsequently, "Ruin A Night's Sleep - Non-New" (CX 8; CX 18) was disseminated concurrently with "Black & White Pan" from August 1993 through June 1994 (JX 2 ¶ 25).

36. The "Activity-Pets" (CX 8; CX 22) and "Activity-Playtime" (CX 8; CX 10; CX 20) television ads were disseminated concurrently from July 1994 through July 1995 (JX 2 ¶ 25).

37. The "Muscles" television ad (CX 11; CX 23) was disseminated from August 1995 through May 1996 (JX 2 ¶ 25).

38. The most recent challenged television ad, "Muscles," last aired in May 1996 (JX 2 ¶ 25). Beginning in May 1996, a revised version of the "Muscles" ad, "New Muscles - Male" (RX 17; RX 24-A), and a revised female version, "New Muscles - Female" (RX 18), have been disseminated (RX 5-Z-84, Z-90-92; RX 17; RX 18; RX 24-A).

2. Free Standing Inserts

39. Between 1987 and mid-1996, Ciba disseminated FSI's for Doan's products in Sunday newspaper supplements two to three times per year (JX 2 ¶ 36). One FSI (CX 32-A) was disseminated on May 21, 1989 in newspapers with circulations totaling 34.9 million, and was used twice again, appearing on October 14, 1990 in 45.3 million individual newspapers (CX 29-J) and on September 29, 1991 in 12.6 million individual newspapers (CX 29-Z-4). On June 2, 1991, two different FSI's (CX 29-U; CX 29-W) appeared in 583,000 newspapers and 473,000 newspapers, respectively. On January 8, 1995, another FSI (CX 53-E; CX 544) appeared in 40.3 million newspapers.

3. Radio Ads

40. From March through December 1991, Ciba tested local radio ads for Doan's in five cities: Denver, Nashville, Oklahoma City, Orlando, and Tampa-St. Petersburg-Clearwater. For each twelve-week flight, the tested Doan's radio ads reached an estimated 45% to 52% of the target audience (adults between the ages of 25 and 54) an average of 17 to 20 times each (JX 2 ¶ 33). In 1992, at least three four-week flights of Doan's radio ads were aired in selected markets (JX 2 ¶ 34).

41. From May through September 1993, Ciba tested Spanish language Doan's radio ads (CX 58 [translated as CX 467]; CX 59 [translated as CX 468]; CX 60 [translated as CX 469]; CX 61 [translated as CX 470]; CX 62 [translated as CX 471]; CX 472 [translated as CX 473]; CX 474 [translated as CX 475]; and CX 476 [translated at CX 477]) targeted at Hispanic consumers in Houston. Three Houston radio stations broadcast between twelve and seventeen Doan's ads weekly for ten weeks (JX 2 ¶ 35).

Novartis voluntarily ceased running the challenged ads in May 1996, prior to the issuance of the complaint (Peabody Tr. 442; JX 2-E ¶ 25).

E. The Claims Conveyed By The Challenged Ads

42. Several expert witnesses were called by the parties to testify about significant issues in this case -- the claims conveyed by the challenged ads, their materiality, and the need for corrective advertising if the complaint's allegations were upheld.

1. Complaint Counsel's Experts

a. Dr. Michael B. Mazis

43. Dr. Mazis is a tenured Professor of Marketing at The American University in the Kogod College of Business Administration (Mazis Tr. 923, 925; CX 417-A, J). Dr. Mazis has taught Principles of Marketing to undergraduates; Marketing and Public Policy to graduate students; marketing research courses to both undergraduates and graduate level students; and consumer behavior courses to undergraduates, graduate level students, and Ph.D. level students (Mazis Tr. 925; CX 417-J).

44. Dr. Mazis received his Doctor of Business Administration from Pennsylvania State University in 1971 with a major in marketing and minors in social psychology and quantitative business analysis (statistics) (Mazis Tr. 924; CX 417-A). From 1971 to 1976, Dr. Mazis was an Assistant Professor and Associate Professor of Marketing at the University of Florida where he taught a variety of courses involving marketing research and consumer behavior (Mazis Tr. 924-25; CX 417-B).

45. From 1976 to 1979, Dr. Mazis served as a full time consultant, first to the FDA's Bureau of Drugs, then in the FTC's Division of National Advertising, and finally as Chief of Marketing and Consumer Research in the FTC's Office of Policy and Planning (Mazis Tr. 925; CX 417-B). During this period he conducted consumer research and worked on a variety of issues related to advertising and consumer information (Mazis Tr. 925).

46. Dr. Mazis was made a full professor at American University in 1981 (Mazis Tr. 925). From 1980 to 1989, he was the Chair of the Department of Marketing. In 1991, Dr. Mazis was awarded the Kogod College Award for Scholarship (CX 417-J).

47. Dr. Mazis has published extensively in peer-reviewed journals, including many articles with application to advertising and public policy issues (CX 417-C-H). These include an article regarding copy testing issues in FTC advertising cases and four articles regarding corrective advertising (Mazis Tr. 926-27; CX 417-E-G).

48. Dr. Mazis was awarded a \$700,000 grant from the National Institutes of Health to study consumer perceptions of alcohol warning labels (Mazis Tr. 926; CX 417-C) and has served as a consultant to several government agencies, including the FTC, the FDA, the Consumer Product Safety Commission, the Department of Justice and the State of California (Mazis Tr. 926; CX 417-J).

49. Dr. Mazis has served as a consultant to numerous private corporations, has conducted litigation copy testing for Lanham Act cases, and has testified as an expert witness (Mazis Tr. 926, 929). In prior expert testimony that has been accepted by the courts, he has on a number of occasions analyzed advertising and marketing materials on the face of the ad and offered an opinion with regard to what reasonable consumers are likely to take away from such advertising or promotional materials (*id.*, 929, 932).

b. Dr. David W. Stewart

50. Dr. Stewart is a full Professor of Marketing in the Marshall School of Business at the University of Southern California (Stewart Tr. 3390-91; CX 589-A, B, E). He holds the Robert E. Brooker Chair and currently serves as the Chairperson of the Department of Marketing (Stewart Tr. 3391, 3393; CX 589-A-B). Dr. Stewart has taught a variety of graduate and undergraduate level courses related to advertising, advertising and promotional management, consumer behavior, marketing research, market analysis, marketing strategy, product management, and sales management (Stewart Tr. 3393; CX 598-E). Dr. Stewart received his Ph.D. and M.A. in psychology from Baylor University and his B.A. in psychology from Northeast Louisiana University (Stewart Tr. 3391; CX 589-A-B).

51. Dr. Stewart has had a long and distinguished academic career. Prior to his teaching at the University of Southern California, he was employed as an Associate Professor of Psychology and Business at Jacksonville State University from 1978 to 1980, and as an Associate Professor of both marketing and psychology at Vanderbilt from 1980 to 1986 (Stewart Tr. 3392; CX 589-E-F).

52. Dr. Stewart has authored or co-authored six books on advertising related issues and has written over 70 articles which have been accepted in peer reviewed academic journals (Stewart Tr. 3396; CX 589-A, Z-1-9). His published works have involved the effectiveness of comparative advertising for brands with low market share, the manner in which advertising campaigns wear in and out, the defensive role of advertising for mature brands, and whether sales increases are sufficient to determine whether an advertising campaign has been successful (Stewart Tr. 3397-98). A number of his publications have involved the ARS copy testing methodology used by Research Systems Corporation (Stewart Tr. 3397, 3450).

53. Dr. Stewart has received numerous academic honors during his teaching career. Currently he is the President of the Academic Council of the American Marketing Association and chairman of the Section on Statistics in Marketing of the American Statistical Association (Stewart Tr. 3393-95; CX 589-A, H). He is a past president of the Society of Consumer Psychology of the American Psychological Association (Stewart Tr. 3395; CX 589-A, I). He has won numerous awards, including awards from the American Academy of Advertising for best paper published during 1989 in the *Journal of Advertising* and the best paper published during 1992-1994 in the *Journal of Public Policy and Marketing* (Stewart Tr. 3397; CX 589-A, C-D).

54. Dr. Stewart has served as the editor, associate editor, or member of the editorial board of numerous academic journals (Stewart Tr. 3397; CX 589-H-J) and has served as a peer reviewer of articles submitted for publication to numerous academic journals (CX 589-J).

55. Dr. Stewart was also employed for two years as the Research Manager for a major advertising agency, Needham, Harper, and Steers (now called DDB Needham) where he managed a research department and was responsible for research, including diagnostic copy testing and communication tests, research regarding markets, and profiling consumers (Stewart Tr. 3391-92; CX 589-A, F).

56. Dr. Stewart has also done extensive consulting work for major corporations in the areas of advertising effectiveness, consumer behavior, and the structure of markets (Stewart Tr. 3398).

57. Dr. Stewart has testified as an expert witness both before the Federal Trade Commission and in U.S. district courts (Stewart Tr. 3399-3400; CX 589-A, T-U). He has previously testified as an expert

in advertising, marketing, marketing research, survey methodology, marketing communication, and branding (Stewart Tr. 3400; CX 589-A).

2. Novartis' Experts

a. Dr. David Scheffman

58. Dr. Scheffman is the Justin Potter Professor of American Competitive Enterprise and Professor of Business Strategy and Marketing at the Owen Graduate School of Management at Vanderbilt University in Nashville, Tennessee (Scheffman Tr. 2513; RX 205-A). He is also a consultant for a national consulting company, Law & Economic Consulting Group, Inc. (Scheffman Tr. 2513, 2515; RX 205-A).

59. Dr. Scheffman teaches courses in marketing, pricing, strategic management, brand equity evaluation and distribution to MBA and executive MBA students (Scheffman Tr. 2516; RX 205-C-D). Dr. Scheffman specializes in industrial organization economics, which uses various theories and tools to evaluate quantitative and qualitative evidence concerning markets and competition (Scheffman Tr. 2513).

60. Dr. Scheffman has a B.S. in mathematics from the University of Minnesota and a Ph.D. from the Massachusetts Institute of Technology in economics (Scheffman Tr. 2512; RX 205-A).

61. Dr. Scheffman worked for the Commission beginning in 1982 (RX 205-B). From 1985 to 1988, he was the Director of the Bureau of Economics, and served as the chief economist on all matters being investigated or litigated by the Commission, including consumer protection matters (Scheffman Tr. 2515; RX 205-B).

62. Dr. Scheffman has co-authored five books and written forty-one articles (RX 205-M-Q). Dr. Scheffman has written articles about the relationship between advertising and product quality, and has authored one book on consumer protection regulation (Scheffman Tr. 2524).

b. Mr. Robert Lavidge

63. Mr. Robert Lavidge was qualified as an expert in consumer survey research, marketing and advertising (Lavidge Tr. 746-47).

64. Mr. Lavidge received a B.A. with highest honors in 1943 from DePauw University, and an M.B.A. with highest honors in 1947 from the University of Chicago (Lavidge Tr. 742; RX 21-A). For over

thirty years, Mr. Lavidge has taught in the areas of marketing and advertising as a member of the adjunct faculty of the Northwestern University School of Management (Lavidge Tr. 743). Since 1980, Mr. Lavidge has served as a member of the Advisory Council for the University of Chicago Graduate School of Business (RX 21-B).

65. Since 1951, Mr. Lavidge has served as the President of Elrick & Lavidge, one of the largest consumer survey research companies in the country (Lavidge Tr. 739). As President of Elrick & Lavidge, Mr. Lavidge has participated in thousands of surveys, hundreds of which have been offered as evidence in court (Lavidge Tr. 739).

66. Mr. Lavidge has served as the President of the American Marketing Association ("AMA") (Lavidge Tr. 740). Mr. Lavidge also has served as the head of the AMA's Marketing Research Division, the chairman of the Census Advisory Committee and of the Long-Range Planning Committee, and is currently serving as the chair of the AMA's Foundation Board of Trustees, which provides a means for members of the AMA and others in the marketing field to perform public service (Lavidge Tr. 741-42).

67. Mr. Lavidge has been qualified as an expert witness concerning marketing and survey research in excess of forty times (Lavidge Tr. 746).

68. In 1961, Mr. Lavidge wrote an article for the Journal of Marketing entitled, "A Model for Predictive Measures of Advertising Effectiveness" (Lavidge Tr. 744; RX 21-C). This article is credited with introducing the concept of the "hierarchy of effects," has been reprinted in numerous publications over the years, and is regarded as a seminal article by researchers and others studying the functions and effects of advertising (Lavidge Tr. 744; Mazis Tr. 1627).

c. Dr. Jacob Jacoby

69. Dr. Jacoby was qualified as an expert in the fields of consumer behavior, consumer research, social science research methodology, and the comprehension and miscomprehension of advertising (Jacoby Tr. 2921-22).

70. Dr. Jacoby received a B.A. in Psychology in 1961 and a Masters in Psychology in 1963 from Brooklyn College (Jacoby Tr. 2910; RX 4-A). Dr. Jacoby received a Ph.D. in Social Psychology from Michigan State University in 1966 (Jacoby Tr. 2910; RX 4-A).

71. Dr. Jacoby has taught for over thirty years in the areas of advertising and marketing (Jacoby Tr. 2911-13; RX 4-A). From 1968 to 1981, Dr. Jacoby served as an assistant professor and then professor in the Department of Psychology at Purdue University (Jacoby Tr. 2911; RX 4-A). While at Purdue, Dr. Jacoby taught courses in consumer behavior and research methods (Jacoby Tr. 2911-12). Since 1981, Dr. Jacoby has held an endowed chair as the Merchants Council Professor, Consumer Behavior and Marketing at the Stern School of Business, New York University (Jacoby Tr. 2912; RX 4-A). At New York University, Dr. Jacoby has taught courses in consumer behavior, research methods, and market research, among others, to undergraduates, masters, and doctoral students (Jacoby Tr. 2912-13; RX 4-A).

72. Since 1968, Dr. Jacoby has worked as a consultant for clients including the Commission, the FDA, General Electric, Pillsbury and Proctor & Gamble, among others (Jacoby Tr. 2905-07). As a consultant, Dr. Jacoby has designed well over 1000 studies, hundreds of which have been offered in court (Jacoby Tr. 2907-08), including hundreds of studies focusing on the effects of advertising (Jacoby Tr. 2908).

73. Dr. Jacoby has served as the President of the Consumer Psychology Division of the American Psychological Association (Jacoby Tr. 2917; RX 4-B). Dr. Jacoby has served on the Executive Committee of the Market Research Council (Jacoby Tr. 2918; RX 4-C). Dr. Jacoby also has served as a reviewer of proposals for the FDA and for the National Science Foundation (Jacoby Tr. 2919; RX 4-C).

74. Dr. Jacoby has co-authored seven books and written over 100 articles, including books and articles on deceptive advertising, corrective advertising, the miscomprehension of televised and print communication, and research methodology (Jacoby Tr. 2920).

75. Dr. Jacoby has been qualified as an expert over 100 times in federal court (Jacoby Tr. 2921).

d. Dr. Morris Whitcup

76. Dr. Morris Whitcup was qualified as an expert in marketing and consumer research (Whitcup Tr. 2102). Dr. Whitcup designed, conducted and analyzed two studies for Novartis (Whitcup Tr. 2082).

77. Dr. Whitcup received a B.A. from Yeshiva College (Whitcup Tr. 2085). He subsequently received a Ph.D. in social psychology

from Columbia University in 1977 (Whitcup Tr. 2085; RX 1-A). Dr. Whitcup has over twenty years of professional experience in consumer marketing research (Whitcup Tr. 2085) and has participated in more than 2,500 marketing research studies (Whitcup Tr. 2093; RX 1-A).

78. In 1995, Dr. Whitcup founded Advanced Analytics, Inc., a full-service market research company (Whitcup Tr. 2089; RX 1-A). Advanced Analytics, Inc. is a division of Guideline Research Corporation, one of the top 50 marketing research companies in the world (Whitcup Tr. 2090; RX 1-A).

79. Over the years, Dr. Whitcup has conducted various types of consumer research studies, including tracking studies, communication studies, and attitude studies (Whitcup Tr. 2094-97).

80. Dr. Whitcup has extensive experience conducting consumer research in the pharmaceutical area (Whitcup Tr. 2088; RX 1-A). For example, Dr. Whitcup was involved in a number of studies related to the switch of Aleve from a prescription brand analgesic to an OTC product (Whitcup Tr. 2098). Dr. Whitcup also has been involved in research for the FDA involving packaging and consumer comprehension of labels and packages (Whitcup Tr. 2089).

81. Dr. Whitcup has been qualified as an expert a number of times in court and before the NAD appeals board and the NARB (Whitcup Tr. 2101; RX 1-A).

e. Dr. James Jaccard

82. Dr. James Jaccard is a professor of psychology at the State University of New York at Albany (Jaccard Tr. 1400; RX 122-C). He specializes in social science research methodology, including the design of scientific experiments and surveys and the analysis of the results to draw conclusions about consumer attitudes, behavior, and decision-making (Jaccard Tr. 1401, 1405). In connection with his work in social science research methodology, Dr. Jaccard has taught, applied, and evaluated statistical methodology for analyzing behavioral data (Jaccard Tr. 1401; RX 122-B).

83. Dr. Jaccard received an A.B. in psychology from the University of California at Berkeley in 1971 (Jaccard Tr. 1400; RX 122-C). He received his A.M. and Ph.D. in social psychology from the University of Illinois, Urbana in 1972 and 1976, respectively (Jaccard Tr. 1400; RX 122-C).

84. Dr. Jaccard has taught and practiced social science research methodology for more than twenty years (RX 122-C-D). Since 1987, he has served as a professor in the Department of Psychology at the State University of New York, Albany, New York (RX 122-C). Dr. Jaccard has taught graduate and undergraduate courses on research methodology, experimental design, and statistical methods as applied to the analysis of behavioral data (Jaccard Tr. 1402; RX 122-B-C, S).

85. Dr. Jaccard has been a statistical consultant for the federal government and the State of New York, as well as for numerous industries (Jaccard Tr. 1403-04; RX 122-B). Dr. Jaccard also has served as a consulting editor for a number of major scientific journals, and has evaluated statistical analyses of original research (Jaccard Tr. 1404-05; RX 122-B).

86. Dr. Jaccard has authored or co-authored four books addressing statistical methods for evaluating behavioral data. He also has written numerous book chapters and articles published in peer reviewed academic journals (RX 122-A, B, D to N). In these articles, Dr. Jaccard has developed, explained, and applied statistical approaches for evaluating behavioral data (Jaccard Tr. 1408). Several of Dr. Jaccard's publications have dealt specifically with consumer attitudes and decision-making (Jaccard Tr. 1406, 1408-09).

3. Facial Analysis Of The Challenged Ads

a. TV Ads

87. In the first ad Ciba created for Doan's -- "Graph" -- (CX 13) a voice-over announces that "New Extra Strength Doan's is made for back pain relief." This statement is followed by a depiction of a Doan's package on the left side of the screen and packages of three competing analgesic brands -- Advil, Extra Strength Tylenol, and Bayer -- on the right. The voice-over states: "with an ingredient these pain relievers don't have," as the spotlight on the competing brands is darkened, leaving only the Doan's package clearly visible on the screen.

88. All of the challenged television ads disseminated after "Graph" continued to focus on Doan's special efficacy in relieving back pain, and emphasized that Doan's has an ingredient not found in competing analgesics. The ads, like "Graph," display and then visually diminish competitive analgesics. The same symbolism has

been used by Doan's competitors (RX 60; CX 14; CX 15; CX 16; CX 17; CX 18; CX 20; CX 22; CX 23).

89. "X-Ray" (CX 14) is a variation of the "Graph" ad with the addition of an audio and visual reference to Doan's as "The back specialist." The Ketchum advertising executive who oversaw Doan's advertising from 1987 through 1991 testified that he intended the "back specialist" phrase to create a memorable analogy to a doctor who treats backs only. A conference report summarizing a meeting between Ciba and Jordan McGrath stated with respect to "X-Ray": "Since Doan's is the expert, Doan's works better for back pain" (CX 131-B).

90. The "back specialist" tag line was used in most subsequent Doan's television ads (CX 15; CX 16; CX 20; CX 22; CX 23).

91. In "Black & White Back" (CX 15), the ingredient the other pain relievers don't have is referred to as a "special ingredient," and in the "Ruin A Night's Sleep" ads (CX 17; CX 18) that ingredient is described as "unique." Jordan McGrath's Senior Vice President, who was responsible for the Doan's ads created subsequent to "Ruin A Night's Sleep," but who was not involved in the creation of "Black & White Back," testified that she would not have approved a Doan's advertisement that contained the phrase "with a special ingredient." (See CX 504 at 116 [Schaler Dep].)

92. The final frames of "Activity-Playtime" (CX 20) and "Activity-Pets" (CX 22), Novartis' more recent ads, depict a package of Doan's alongside packages of Advil, Tylenol, Bayer, and a newly introduced competitor, Aleve, while the voice-over states that "Doan's has an ingredient these pain relievers don't have." These ads conclude with the "back specialist" tag line, as does "Muscles" (CX 23).

b. Free Standing Inserts

93. An FSI that first ran in 1989 (and that was disseminated again in 1990 and 1991) features a large Doan's package alongside smaller but clearly visible packages of Advil, Extra-Strength Tylenol, and Bayer (CX 32-A; CX 29-J; CX 29-Z-4). Prominent copy above the packages states: "Doan's. Made for back pain relief." Under this statement, and just above the packages of the competing brands, is the claim "With an ingredient these other pain relievers don't have."

94. One of two FSI's that ran in 1991 headlined: "Back Pain Sufferers -- It's Easy to See Why You Need Doan's" (CX 29-W). This

statement appears directly above packages of Bayer, Extra-Strength Tylenol, Advil, and Motrin. A magnifying glass is superimposed on the packages, highlighting an excerpt from the product labeling for Extra-Strength Tylenol, *i.e.*, that Extra Strength Tylenol is "For the temporary relief of minor aches, pains, headaches and fever." Below the competing packages is the phrase "These are for all kinds of aches and pains." To the right is a Doan's package accompanied by the words "Doan's is just for back pain." The second FSI features the statement "Back pain is different" above a display of the three competing analgesic packages, with the phrase "Why use these pain relievers?" alongside them (CX 29-U). Directly below is a package of Doan's and the words "Doan's is just for back pain." In a similar vein, a 1995 FSI asks "Why Treat General Aches?" above a display of packages of Bayer, Extra Strength Tylenol, Advil and Aleve (CX 53-E; CX 544). It continues: "Back Pain Needs the Specialist," set above pictures of Doan's packages.

c. Radio Ads

95. In a Spanish radio ad, a woman complains of back pain and a man tells her, "Buy Doan's. It's the medicine that works best when I need back pain relief" (CX 61 [translated as CX 470]). She asks, "And what is it that Doan's has that makes it work so well?" The announcer answers her, "Doan's has a unique ingredient that alleviates pain, and no other pain reliever has it." The ad concludes "Trust Doan's, the back specialist."

96. The claims in its TV, FSI and radio ads that Doan's is special because it has an ingredient other pain relievers don't have, that it is the "back specialist" (*see* CX 131-B) and that it is made for back pain relief clearly carries the message that it is more effective than other OTC analgesics for back pain relief.

d. Expert Testimony

97. Dr. Jacoby testified that it would be inappropriate for an expert to make a facial analysis of the challenged ads (Jacoby Tr. 2945).

98. Dr. Mazis disagreed, and, applying his understanding of consumer psychology and after reviewing certain Ciba strategy and research documents, testified that several Doan's ads made the alleged superiority claim. He stated that "Graph," which refers to an

"ingredient that [other] pain relievers don't have" conveys the message that Doan's is unique and different, and couples this claim with references to back pain, thus conveying the net impression that Doan's is more effective for back pain relief than other pain relievers mentioned in the ad (Mazis Tr. 932, 949-51, 957; CX 508-Z-32).

99. Dr. Mazis gave essentially the same opinion with respect to other Doan's TV ads and FSI's comparing Doan's with other OTC analgesics: "X-Ray" (adding "The Back Specialist") (CX 14; Mazis Tr. 952-54); "Black & White Back" (CX 15; Mazis Tr. 958-60); "Black & White Pan" (CX 16; Mazis Tr. 960-63); "Ruin A Night's Sleep" (CX 17; Mazis Tr. 961-62) and "Ruin A Night's Sleep - Non-New" (CX 17; CX 18; Mazis Tr. 961-63); "Activity-Pets" and "Activity-Playtime" (CX 20; CX 22; Mazis Tr. 964-66); "Muscles" (Mazis Tr. 966-69); FSI, May 1989 (CX 32-A; Mazis Tr. 971); FSI "Back Pain Is Different" (CX 29-U; Mazis Tr. 974); FSI "back pain sufferers" (CX 29-W; Mazis Tr. 974-76); FSI, 1995 (CX 53-E; CX 544; Mazis Tr. 976-78).

4. Novartis' Knowledge Of The Claims Conveyed By The Ads

100. Ciba's Marketing Department knew that advertising claims required substantiation, and that, while the OTC Analgesics Monograph supported efficacy claims, superiority claims would require one or two well-controlled clinical studies (CX 501 at 27-28 [Sloan Dep.]; *see also* CX 499 at 58-59 [Nagy Dep.]). Company officials, members of the Marketing Department, and ad agency executives were unaware of any scientific evidence that Doan's was more effective than other analgesics (*see e.g.*, CX 501 at 8-10 [Sloan Dep.]; CX 496 at 64-65 [Caputo Dep.]; CX 497 at 42 [Esayian Dep.]; CX 498 at 18-19 [Gray Dep.]; CX 499 at 58-59 [Nagy Dep.]; CX 500 at 62 [Russo Dep.]; CX 504 at 48-49 [Schaler Dep.]).

101. In a 1994 letter addressed to the Marketing Director for Doan's, Jordan McGrath's Senior Vice President responsible for Doan's stated: "Doan's cannot support product 'superiority' . . . nor can it deliver a unique or seemingly superior consumer benefit" (CX 169-D; CX 504 at 136 [Schaler Dep.]).

102. In a "demo exploratory" document attached to a summary of discussions between Jordan McGrath and Ciba regarding creative strategy for 1995, the agency noted:

While we would like to *imply* that Doan's provides superior efficacy because of its unique ingredient, we cannot clinically support this since the other brands work equally well as Doan's at relieving back pain.

(emphasis in original) (CX 147-J.)

103. In a June 1995 response to an inquiry from the Federal Trade Commission, Ciba's Vice President of Marketing responsible for Doan's wrote that there are "no such documents or studies in existence demonstrating that magnesium salicylate relieves back pain more quickly and/or effectively than acetaminophen, aspirin, ibuprofen or naproxen sodium" (CX 584).

104. Despite its awareness that it lacked substantiation, Ciba knowingly and intentionally conveyed in its ads that Doan's was better for back pain than other OTC analgesics, an intention which is shown by the creative strategy upon which the first ads it created were based: "Graph" (CX 13) and "X-Ray" (CX 14). This strategy targeted "adults 35+ who: suffer from backache" and "seek better relief than provided by all purpose pain relievers" and sought to convince them that because Doan's "is made for back pain relief" and "contains a back pain medicine that no leading analgesic product has" it "provides relief from backache that the leading pain relievers may not be able to do" (CX 508-Z-31-32; Peabody Tr. 260-61).

105. Mr. Peabody testified that a reason that Ciba tested Doan's commercials prior to dissemination was to make sure that the ad did not miscommunicate a claim for which Ciba did not have support, and that he became concerned about miscommunication if an ad communicated a claim in copy testing at a 10% to 15% level (Peabody Tr. 149-51), but that he would not be concerned if the target audience was composed of a disproportionate share of users since this group tends to play back a "more favorable message" (Peabody Tr. 617-18).

106. A communication test of the "Graph" ad conducted prior to its production and dissemination informed virtually all of the senior marketing executives at Ciba that it communicated "product superiority" to 38% of respondents (CX 225-C; Peabody Tr. 171-73). This exceeded Mr. Peabody's 10% to 15% miscommunication threshold. An executive summary of the results of this study recommended the production of "Graph," since it had the strengths of the prior ad "as well as communicates product superiority and perceived efficacy" (CX 225-A-D). Doan's 1989 Marketing Plan

repeated the product superiority playback and described the ad as a "strong execution which effectively communicates product superiority and perceived efficacy" (CX 335-Z-8). Ciba disseminated the "Graph" ad from May 1988 through June 1991 (JX 2 ¶ 25).

107. The report of a 1989 focus group of the "Graph" ad informed Ciba that "[m]entioning the competitive brands by name ... appears to create the impression that Doan's may in fact be better than the other brands, thereby promulgating a more favorable predisposition to trying Doan's" (CX 227-Z-3).

108. In September 1990, Ciba commissioned a communication test of three alternative commercial executions to see which best communicated Doan's "Relieving All Kinds of Back Pain" strategy. One of the three ads was the "Black & White Back" ad (CX 15). The test showed that it had a 62% open-ended communication of "superiority over other products" (CX 236-M, Z-67; Peabody Tr. 180). (An open-ended question is one that provides respondents with very little context or structure in order to obtain unprompted answers in respondents' own words (Mazis Tr. 100; Peabody Tr. 165).) The ad was tested prior to its production by the ASI 24-hour delayed-recall methodology (CX 76-A-D; CX 237-A-Z-38; Peabody Tr. 181). A memorandum from the Marketing Research Department to Ciba's senior marketing executives compared ASI test results of "Black & White Back" to an ASI test of "Graph" and reported that "'Black and White Back' does a better job than 'Graph' in establishing Doan's relief/efficacy, quality, and brand superiority" (CX 76-A, C; Peabody Tr. 183-85). A Doan's Marketing Plan also reported, "Our current execution, 'Black & White Back,' is a strong performer Communicates backache relief, efficacy and product superiority" (CX 360-Z-100; Peabody Tr. 263). Ciba disseminated the "Black & White Back" ad from June 1991 through October 1992 (JX 2 ¶ 25).

109. A pre-production communications test of the "Ruin A Night's Sleep" ad reported 35% open-ended communication of "superiority over other products" among non-users of Doan's and 15% open-ended communication of "superiority over other products" among Doan's users (CX 244-F, T; Peabody Tr. 188-89). A report of this study, as well as an executive summary, was distributed to the Marketing Department. Ciba disseminated the "Ruin A Night's Sleep" ad from January 1992 through August 1992, and then disseminated "Ruin A Night's Sleep - Non-New" (CX 18) from August 1993 through June 1994 (JX 2 ¶ 25).

110. In April 1993, Ciba switched the Doan's account from Ketchum Advertising to Jordan McGrath. Ciba and its new ad agency intended to convey the message that Doan's was more effective for back pain. A December 1993 Conference Report of discussions between Ciba and Jordan McGrath indicates that Ciba and the agency agreed to pursue several executions to "strongly communicate that Doan's has something the others don't have (thereby implying that Doan's is different/better)" and to "more clearly communicate that since Doan's is the expert, Doan's works better on back pain" (emphasis in originals) (CX 131-A-B).

111. In May 1994, Ciba and Jordan McGrath were put on notice regarding an implied superiority claim. Jordan McGrath wrote to Ciba:

All three Networks are requiring substantiation for the claim "If nothing you take seems to help." The Networks believe that this language implies that Doan's provides superior efficacy vis-a-vis the competitive products shown As such, to make this claim, we will need substantiation that Doan's is more effective (due to its Magnesium Salicylate ingredient) at relieving back pain versus the competitors pictured.

Importantly, our Agency council [sic] agrees with the networks.

(emphasis in original) (CX 165-A). Ciba could not provide the networks with substantiation (*see*, CX 166-A; CX 503 at 83-93 [Jackson Dep.]; CPF. ?). The "Activity" ads disseminated later contain language similar to that which the networks disapproved: "If nothing seems to help try Doan's. It relieves back pain no matter where it hurts. Doan's has an ingredient these pain relievers don't have" (CX 20).

112. Further evidence of Ciba's knowledge of its implied superiority claim involves the "Activity-Playtime" (CX 20) ad. At approximately the same time the ad was first disseminated, it was tested by ARS using its 72-hour delayed recall testing methodology (CX 169-A; CX 387-G). Several weeks after "Activity-Playtime" began airing, Jordan McGrath's Senior Vice President responsible for Doan's wrote to Ciba's Marketing Director, notifying her that the ARS testing showed 12% "implied superiority" and stating:

Doan's cannot support product "superiority" ... nor can it deliver a unique or seemingly superior consumer benefit. Hence, it's a challenge for the advertising execution to compensate and persuasively deliver a dimension of competitive "news."

(CX 169-B, D; CX 504 at 133-34 [Schaler Dep.]). Several days later, the agency's Vice President Account Supervisor also wrote to Ciba's Marketing Director, telling her:

"Unfortunately, as we all know, in the Doan's 'Activity' executions our 'unique ingredient' story is not linked to a specific 'back pain relief' claim. Rather our claim 'Doan's has an ingredient these pain relievers don't have,' is used as a copy point that stands by itself with the objective of implied superiority."

(emphasis in original) (CX 170-B; *see* CX 503 at 55-58 [Jackson Dep.]; CX 504 at 143-44 [Schaler Dep.]). Subsequent to this correspondence, no one from Ciba asked that the "Activity-Playtime" ad be modified or withdrawn from dissemination (CX 504 at 135-36 [Schaler Dep.]; CX 503 at 57-58 [Jackson Dep.]). Ciba disseminated the "Activity-Playtime" ad from July 1994 through July 1995 (JX 2 ¶ 25).

113. In a "demo exploratory" attached to a February 1995 Conference Report of a meeting between Ciba and Jordan McGrath regarding the creative strategy for 1995, the agency noted:

While we would like to *imply* that Doan's provides superior efficacy because of its unique ingredient, we cannot clinically support this since the other brands work equally well as Doan's at relieving back pain.

(emphasis in original)(CX 147-J). Nevertheless, before the "Muscles" (CX 23) ad was produced it was also tested by ARS 72-hour delayed recall testing (CX 265-A; Peabody Tr. 191-93). In that study, 18% of those with related recall played back a "better/best product" claim (*see* CX 265-M; Peabody Tr. 196). A report of this study, as well as an executive summary, was distributed to the Marketing Department (CX 265-A). The executive summary noted that "The conclusion that our product may be better/best is more likely to be conveyed in 'Muscles' than in 'Activity Playtime'" (CX 265-B). Ciba disseminated the "Muscles" ad from August 1995 through May 1996 (JX 2 ¶ 25).

114. Although comparative advertising may be the optimal technique for the promotion of low-share brands (Stewart Tr. 3459) and although Mr. Peabody denied any intention by Ciba to do so (Peabody Tr. 539), I find that Ciba's advertising campaign created the false message that Doan's was more effective for the relief of back pain than other OTC analgesics. This finding is based on the clear

import of the challenged ads, Dr. Mazis' analysis of them, and Ciba's comments on those ads (F 98, 99, 102, 104, 106, 107-113).

5. Copy Tests Of The Challenged Ads

115. Respondents or their agents performed copy tests in the ordinary course of business on a number of the challenged ads. In addition, complaint counsel commissioned the United States Research Company ("USR") to execute a copy test of two of the challenged ads. These tests support the conclusion that Doan's ads communicated the false message that it was superior to other OTC analgesics for the relief of back pain.

a. Copy Tests Conducted For Ciba

(1) Bruno & Ridgeway Copy Tests Of The "Graph" Ad

116. In March 1988, Bruno & Ridgeway, an independent consumer research company, copy tested the "Graph" ad (CX 2; CX 13), a potential ad, "Twisted," and an ad which was being run, "Hollingshead" (CX 224-E; Peabody Tr. 158). The questionnaires were designed by the staff of Ciba's marketing department and researchers at Bruno & Ridgeway (Peabody Tr. 159-60; CX 502 at 70).

117. This test used the mall intercept method in six geographically dispersed shopping centers. Qualified respondents were taken to a central interviewing room and were shown one of the test ads (Mazis Tr. 996; CX 224-D; Z-97).

118. Qualified respondents included adult back pain sufferers/treaters aged 35 to 64 (CX 224-E, Z-97-98; Mazis Tr. 997; Peabody Tr. 158-59). Respondents were not required to have used or been aware of Doan's for the treatment of backache. These demographics constituted the target audience that Ciba was attempting to reach with its Doan's ads at the time (Peabody Tr. 159). This was an appropriate group of consumers upon which to test these ads (Whitcup Tr. 2383-84; Mazis Tr. 997).

119. A total of 300 copy test respondents were included in this survey (CX 224-E). Each respondent was shown one of the three tested ads which were in a rough, unfinished form. Ciba routinely tested unfinished ads to save the approximately \$300,000 it would cost to produce fully three different ads, none of which might ultimately be aired (Peabody Tr. 338-39). In the experience of Ciba's marketing research department, the results obtained from copy testing

rough versions of Doan's ads provided an accurate measure of how those ads would communicate to consumers in finished form (Peabody Tr. 148-49, 338-40; CX 224-Z-99).

120. Approximately 100 respondents were exposed twice to each tested ad (CX 224-E, Z-99; Mazis Tr. 999-1000). Thereafter, they were asked to identify the advertised product, state how likely they were to buy it, and explain why (Questions 7a-8b) (CX 224-Z-100).

121. Respondents were then asked an open-ended question (F 108) (9a) asking what they thought was the main idea of the ad (*id.*; Mazis Tr. 1000-01). Thereafter, respondents were asked another open-ended question (9c) to elicit what other ideas had been communicated to them by the ad (CX 224-Z-101; Mazis Tr. 1002). There is nothing in the questionnaire that would bias the results of the copy test (CX 502 at 74 [Wright Dep.]).

122. In response to question 9a, 18% of the respondents answered that the main idea of the "Graph" ad was "Superior to other products" (CX 224-M; Mazis Tr. 1002). When the results of the "main idea" question (9a) and the "other ideas" question (9c) were netted, 38% of the respondents exposed to the "Graph" ad were coded as answering that it communicated that Doan's was "Superior to other products" (CX 224-M; Mazis Tr. 1003; Peabody Tr. 163-64).

123. The open-ended responses that were coded as "Superior to other products" only included responses that Doan's was "better than/more effective than other products" (CX 224-Z-22; Mazis Tr. 1006; CX 502 at 84 [Wright Dep.]). In their own research conducted for this litigation, the experts for both parties coded such "better than/more effective than other products" responses to mean superior efficacy for back pain, since back pain is the subject of the ads (Whitcup Tr. 2418-23; Jacoby Tr. 3063; Lavidge Tr. 902-03; RX 128-D-E). The "Superior to other products" category is equivalent to the superior efficacy claim alleged in the complaint (Mazis Tr. 1007).

124. A 38% communication of a superior efficacy message in response to open-ended questions is quite high (Mazis Tr. 1009). In its report to Ciba, Bruno & Ridgeway concluded that the "Graph" ad was "successful at communicating the more specific ideas of: ... Superiority to other products" (CX 224-K).

125. Respondents' marketing research department recommended "Graph" for finished production since it had many of the same

strengths as "Hollingshead" and communicated product superiority and perceived efficacy (CX 225-D).

126. The "Graph" test did not use a control ad, *i.e.*, an ad that is similar to the tested ad but which is believed not to make the claim that the tested ad is making. The purpose of a control ad is to account for "noise" -- responses that come from sources other than the ad's communication (Mazis Tr. 1077-78). For close-ended questions, the results of the control ad are subtracted from the results of the test ad to net out the effects of such noise. (Close-ended questions ask about specific topics and provide the respondent with a finite number of response options such as "yes" or "no" or "more," "same" or "less," *Kraft, Inc.*, 114 FTC 40, 68 (1991).) The results obtained from open-ended questions are usually not deducted from the test ad (Jacoby Tr. 325).

127. Copy testing research done in the ordinary course of business for Ciba did not employ control ads (*id.* at 354-56). Ciba relied heavily upon these copy tests in making consumer research-based business decisions (Peabody Tr. 354-56, 622).

128. The "Hollingshead" ad tested in CX 224 had an Extra-Strength tag line to announce its introduction. Only 7% of the respondents exposed to "Hollingshead" were coded as saying it conveyed a "superior to other products" claim. Thirty-seven percent of them were coded as stating that it communicated extra strength (CX 224-M; Mazis Tr. 1009).

129. Both the "Graph" and "Hollingshead" ads promoted Extra-Strength Doan's. Of the respondents viewing the "Graph" ad, 38% were coded as stating it communicated "Superior to other products," but only 24% were coded as stating it communicated "Extra Strength." Conversely, 7% of the respondents viewing "Hollingshead" were coded as stating the ad communicated "Superior to other products," but 37% were coded as stating it communicated "Extra-Strength" (CX 224-M). There is no correlation between consumer playback of the extra strength nature of the advertised Doan's product and consumer playback of superior efficacy (CX 224-M; Whitcup Tr. 2376-81).

130. Responses to open-ended questions 9a and 9c that were coded as "Extra-Strength" in CX 224 were not included in the "Superior to other products" code (Peabody Tr. 610-12; Whitcup Tr. 2355). Based upon the copy test results, Ciba's marketing research

department concluded that "Extra Strength" was a secondary message for the "Hollingshead" execution. It did not find "Extra Strength" to be a secondary message in the "Graph" ad, which the marketing research department stated "was perhaps due to greater intrusiveness of Extra Strength in Hollingshead" (CX 225-C).

(2) Bruno & Ridgeway Copy Test Of The "Black & White Back" Ad

131. In September 1990, Bruno & Ridgeway copy tested the "Black & White Back" ad (CX 15) and two other potential ads named "Thermography" and "Broadcast News" (CX 236-E-F; Peabody Tr. 174).

132. The purpose of this mall intercept copy test was to test these ads for communication of a new message: that Doan's was effective at relieving all kinds of back pain (Peabody Tr. 357-76; CX 236-E).

133. The target audience in this test was current and lapsed Doan's users (users who had not used Doan's in the previous six months (CX 236-E-F; Peabody Tr. 376).

134. Approximately 100 copy test respondents were exposed to each tested ad (CX 236-Z-44). Each respondent was shown one of the three tested ads in unfinished form (*id.* at Z-206). The first exposure placed the Doan's ad in the middle of a reel of five commercials. The four ads surrounding the Doan's ad were for products unrelated to analgesics or back pain (CX 236-Z-44, Z-206; Mazis Tr. 1012-13). This "clutter reel" methodology was infrequently used by Ciba (Peabody Tr. 175).

135. After this first exposure, respondents were asked what products they recalled being advertised. For those who recalled a Doan's ad, three open-ended questions (5a-c) were asked to elicit respondents' take-away from the Doan's ad. Respondents were then exposed to the Doan's ad by itself (CX 236-Z-206-07; Peabody Tr. 175-76).

136. Following the second exposure to the Doan's ad, respondents were asked open-ended questions regarding what brand was advertised (questions 7a-b), what was the main idea of the ad (question 8), what other ideas was the ad trying to communicate (question 9), and what, based upon the ad, the respondent would like about the advertised product (questions 10a-b) (CX 236-Z-207-08; Mazis Tr. 1017-18). Open-ended questions 8-10 were not leading (Mazis Tr. 1023; *see* Peabody Tr. 178).

137. In response to open-ended questions, 5a-c, 46% of the respondents who saw the "Black & White Back" ad gave answers that were coded as "Superiority over other products" (CX 236-J, T; Mazis Tr. 1018; Peabody Tr. 177). Bruno & Ridgeway included a number of groups of comments into this superiority coding category, including "Better/more effective than Tylenol/Advil/aspirin," "Works better than other products," "Best backache medication," and "Works faster than other brands" (CX 236-T, Z-67-68). Dr. Mazis testified that the 46% result was extraordinarily high and demonstrates consumer take-away of the superior efficacy message (Mazis Tr. 1022).

138. Bruno & Ridgeway also netted the "Superiority over other products" responses for all of the open-ended questions (5a-c, 8, 9, and 10a-b) (CX 236-Z-67; Mazis Tr. 1021; Peabody Tr. 179). The result of that netting shows that 62% of the respondents exposed to "Black & White Back" understood it to communicate a superior efficacy claim (CX 236-Y, Z-67; Mazis Tr. 1021; Peabody Tr. 180). Bruno & Ridgeway concluded that this data established that "Black & White Back" "generate[d] high playback of Doan's being superior to other products. . . ." (CX 236-M) and that it "appear[s] to be highly successful at breaking through clutter" (CX 236-I). Clutter refers to the other commercials that were shown respondents in this copy test (CX 236-E, I; Mazis Tr. 1012-13).

139. Sixteen percent of the respondents viewing "Black & White Back" gave an answer to an open-ended question that was coded as "Extra Strength" (CX 236-Z-71). The 16% of responses coded as "Extra Strength" were not included in the "Superiority over other products" coding category (*see* Peabody Tr. 619-22; Whitcup Tr. 2355).

(3) December 1990 ASI Copy Test Of The "Black & White Back" Ad

140. In December 1990, Ciba had a research company, ASI, conduct a copy test on the same "Black & White Back" commercial that was tested in the 1990 Bruno & Ridgeway Copy Test (Peabody Tr. 386-87; RX 98-A-Z-11). Consumer playback was measured 24 hours after exposure to the commercial through telephone interviews (Peabody Tr. 387-88).

141. The 1990 ASI Copy Test reported that only 3% of the 384 respondents questioned twenty-four hours after exposure to the "Black & White Back" commercial said that it communicated "product superiority" (Peabody Tr. 389; RX 98-H). Similarly, only 1% of respondents played back that Doan's was "more effective/works better" in comparison to other products (Peabody Tr. 390; RX 98-H).

142. Ciba believed that the ASI testing method is closer to a real world viewing situation than the Bruno & Ridgeway method, and, since it measures both communication and recall, that the data from the 1990 ASI Copy Test provided more reliable evidence of the effectiveness of the "Black & White Back" commercial than data from the 1990 Bruno & Ridgeway Copy Test (Peabody Tr. 392, 394-95).

(4) The Bruno & Ridgeway Copy Test Of The
"Ruin A Night's Sleep" Ad

143. In October 1991, Bruno & Ridgeway copy tested the "Ruin A Night's Sleep" and "Car Bed" ads (CX 7; CX 17; CX 244-B; Peabody Tr. 185) to determine which of the ads best communicated consumers' response to the new Doan's P.M., a line extension product aimed at people who suffered nighttime back pain (Peabody Tr. 396-97).

144. This copy test used the mall intercept procedure, and it targeted nighttime back pain sufferers/treaters within the past 6 months, aged 25-60, one-half of whom who had ever used Doan's (CX 243-A-C; CX 244-B; CX 245-H; Peabody Tr. 186-87).

145. Respondents were asked open-ended questions and a close-ended question (CX 243-D; Mazis Tr. 1033).

146. Approximately 25% of consumers gave answers that were coded "superiority over other products," a result which Dr. Mazis testified was quite high for open-ended questions. This superiority coding included such responses as "works better than others," "Better than Tylenol," "Better than Advil," "Better than Bayer" (Mazis Tr. 1039-40).

147. Four percent of the respondents reported that the "Ruin A Night's Sleep" ad communicated that Doan's "is the best brand for back pain versus other brands" (Peabody Tr. 405; CX 244-V) and Mr. Peabody claimed that the rest of the 25% superiority playback was linked to the presence of the second sleep ingredient in Doan's

P.M. which was not available in formulations offered by Doan's competitors (Peabody Tr. 405-06).

(5) 1991 ARS Copy Test Of "Ruin A Night's Sleep"

148. In 1991, ARS (F 159) tested the "Ruin A Night's Sleep" commercial and found that only 2% of the 165 backache sufferers reported 72 hours after exposure that it communicated that Doan's was "effective/works/better" and four percent of these respondents reported that the commercial communicated "good product/better/best" (Peabody Tr. 411; RX 89-Z-20). Of the 81 nighttime backache sufferers/treaters included in the test, 7% reported that the commercial communicated "good product/better/best" (Peabody Tr. 412; RX 89-Z-20).

149. In addition, there were no respondents in the 1991 ARS Copy Test who recalled that "Ruin A Night's Sleep" communicated that Doan's P.M. had a "unique combination of ingredients/pain relieving medicine that Advil, Tylenol & Bayer don't have" (Peabody Tr. 414-15; RX 89-P, R, S, T, U).

(6) The 1993 ARS Copy Test Of "Black & White Pan Rev. 15"

150. In 1993, Ciba asked ARS to conduct a copy test of the proposed "Black & White Pan Rev. 15" commercial (Peabody Tr. 436; RX 32-A-Z-33). The ARS testing methodology measures the "persuasion" of a proposed commercial on a scale of one to seven. A score of zero to two is called "inelastic" and predicts a zero percent chance of the proposed advertising generating sales (Peabody Tr. 416-18; Stewart Tr. 3522). A score of two to four is called "low elasticity" and indicates that there is only a small possibility that the advertisement will increase sales (Peabody Tr. 418). A score of four to seven is called "moderate elasticity" and predicts a 50% chance of positive sales response from the advertising (Peabody Tr. 417).

151. Dr. Stewart testified that the ARS persuasion score was a "perfectly appropriate measure" for Ciba to rely upon in determining the effectiveness of its advertising campaign (Stewart Tr. 3516).

152. "Black & White Pan Rev. 15" scored in the low elasticity range of 2.3 to 3.7 on the ARS persuasion scale (Peabody Tr. 437; RX 32-F). Despite this, Ciba ran the "Black & White Pan Rev. 15" commercial (Peabody Tr. 437).

153. In addition to poor persuasion scores, 4% of the 163 male and female back pain sufferers who viewed "Black & White Pan Rev. 15" recalled that the commercial communicated "good product/better/best" (Peabody Tr. 438; RX 32-Y). Because playback of "good product" does not necessarily connote superiority, Mr. Peabody testified that the 4% figure overestimated the playback of a more effective claim in the 1993 ARS Copy Test (Peabody Tr. 438-39).

154. One percent of respondents recalled that "Black & White Pan Rev. 15" communicated that Doan's "contains a back pain relieving medicine that no leading analgesic product has" (Peabody Tr. 440; RX 32-M).

(7) The 1994 ARS Copy Test Of "Activity-Playtime"

155. In 1994, Ciba had ARS conduct a copy test of the proposed "Activity-Playtime" commercial. The persuasion scores for it were "abysmally low," *i.e.*, in the 1.5 to 2.1 inelastic range (Peabody Tr. 429; RX 33-J). According to ARS studies, a score in this range would not have any positive impact on Doan's sales (Stewart Tr. 3514).

156. Nevertheless, Ciba decided to run this commercial because the "prior ad we had been running I think at this point was worn out, was equally as ineffective as this one" (Peabody Tr. 429).

157. In addition to the "abysmal" persuasion scores, only 4% of the 201 male and female backache sufferers who viewed the "Activity-Playtime" commercial recalled -- 72 hours after exposure -- that the commercial communicated "works/effective/more effective" (Peabody Tr. 433; RX 33-Z-4). Three percent of these respondents recalled that the commercial communicated "good product/better/best" (Peabody Tr. 434; RX 33-Z-4).

158. Less than ½ % of respondents recalled that "Activity-Playtime" communicated that Doan's "has an ingredient other pain relievers don't have" (Peabody Tr. 435; RX 33-Z-5). Less than ½ % of respondents recalled the commercial communicating that Doan's "has a special ingredient others don't have" (Peabody Tr. 435-36; RX 33-Z-5).

(8) The 1995 ARS Copy Test Of "Muscles"

159. In late March and early April 1995, ARS, an independent consumer research provider, implemented a 72-hour delayed recall

test of the "Muscles" ad (CX 11, 23) (CX 265; Peabody Tr. 191). ARS testing is done in a theater-type setting where respondents are pre-recruited to watch two pilot television shows. Prior to viewing the program, respondents are given a depiction of various products in each category in which the brands whose advertisements will be tested compete, and are asked to select one from each product category with the promise that one person will win their selections. They then view the program material, which is interspersed with pods of ads. At the end of the program, the product selection task is done again, with the promise that another respondent will win the products they select (Peabody Tr. 191-93; Stewart Tr. 3450-51).

160. An ARS test includes a total of 12 ads in the one hour of programming shown. The remaining 11 ads are in product categories unrelated to the ad being tested (CX 265-Z-23; Peabody Tr. 194).

161. From the data it obtains comparing the respondents' product selections made before and after exposure to the programming material and ads, ARS calculates a persuasion score for each ad tested. In making this calculation, ARS takes additional factors into account, such as the number of competitors in the product category and the degree of brand switching in that category. Positive scores are interpreted to mean that the ad will have a net persuasive affect (Stewart Tr. 3450-52; Peabody Tr. 191-93).

162. Seventy-two hours after the ARS test is conducted, respondents are recontacted by telephone. If they can remember an ad for the tested product and give some correct playback from that ad, they are considered to be a "related recaller" of the ad (Peabody Tr. 193; CX 265-Z-23). For evaluative purposes, ARS also provides a "norm" related recall score, which is an average calculated from scores obtained for all ads tested by ARS in the category in which the brand competes (Stewart Tr. 3452-53; *see* CX 265-L). The ARS "norm" against which the Doan's ads were compared was 23%+ related recall, *i.e.*, whether 23% or more of the respondents recalled the ad and gave some correct playback from it (CX 265-L). Recall above that level was viewed as more memorable than the average ad for the category, which is calculated mostly from 30-second ads. Dr. Stewart acknowledged that "Muscles," as well as "Black & White Back" and "Activity Playtime," although persuasive, were not memorable (Stewart Tr. 3449, 3452-53).

163. The persuasion scores for "Muscles" were in the low elasticity range with a low likelihood of generating a positive sales response (Peabody Tr. 441-42).

164. The results reported by ARS for the sample of "male and female back pain sufferers in past year" in the "Muscles" ad test was based upon the entire sample of 143 such respondents. Of that sample, 45% had any related recall of the tested ad and 8% were coded as having said "superiority" was a claim conveyed by the ad (CX 265-M; Peabody Tr. 196; Mazis Tr. 1064-65). As a percentage of the related recallers, however, 18% of the recalling sample took away the "superiority" claim (Mazis Tr. 1065-66; *see* Peabody Tr. 196).

(9) Doan's FSI Mail Panel Communication Test

165. In January 1991, Market Facts, an independent consumer research provider, undertook a communication study of several Doan's FSI's using its mail panel research methodology (CX 238; Peabody Tr. 207-15; CX 502 at 47-49 [Wright Dep.]).

166. The respondents who were surveyed by Market Facts had previously completed a mail panel questionnaire inquiring about backaches and how they are treated (CX 238-Z-126; Peabody Tr. 209). The survey was mailed to the members of the Market Facts mail panel with instructions to give the questionnaire to the person in the household who had completed the previous backache related questionnaire (CX 238-Z-126; Peabody Tr. 208-09). No verification procedure was undertaken to ensure that the individual completing this questionnaire was identical to the one who completed the earlier questionnaire (Peabody Tr. 209-10).

167. One purpose of the mail panel study was to determine the communication effect of five FSI's (CX 502 at 47-48 [Wright Dep.]). Question 5 of the questionnaire asked respondents to rate their agreement or disagreement with a list of statements on a five-point scale, "[b]ased on what this offer [FSI] said about Doan's" (CX 238-Z-128). One of those statements was: "Is better for back pain than other pain relievers" (*id.*).

168. The results of question 5 for the statement "Is better for back pain than other pain relievers" were presented at CX 238-Z-71 (Peabody Tr. 214-15). For an FSI that was identical to CX 32-A and nearly identical to CX 29-J and CX 29-Z-4 (CPF 165), 47.4% of the

respondents strongly or somewhat agreed that the FSI made that claim (CX 238-Z-71; *see* Peabody Tr. 212-13).

169. For FSI's that were substantially similar to CX 29-U and 29-W (CPF 165), 51.5% and 59.0%, respectively, of the respondents strongly or somewhat agreed that the FSI's made the superior efficacy claim (CX 238-Z-71; *see* Peabody Tr. 207-08, 213-14).

b. Dr. Mazis' Copy Test

170. U.S. Research, Inc. ("USR") conducted a mall intercept copy test designed by Dr. Mazis to determine if two of the challenged ads communicated the superiority claim. The Doan's ads tested were "Activity-Playtime" (CX 10) and an FSI entitled "Why treat general aches? Back pain needs the back specialist" (CX 53). Dr. Mazis' use of an FSI was appropriate because it contained an ad message as well as a coupon (Mazis Tr. 976, 1902, 2034-35).

171. The copy test used the "funneling" technique: it asked open-ended questions followed by filtering questions to focus the questioning and minimize guessing, and then close-ended questions (Mazis Tr. 1084-90). The test also used a screener, a main questionnaire, and, to eliminate bias, control ads and control questions (Mazis Tr. 1077, 1087, 1090; CX 419-K-Z-8).

172. USR pretested the main questionnaire to determine if any of the questions were confusing. Some changes were made to the questionnaire (Kloc Tr. 671, 708). USR also validated the test to ensure that there was no interviewer misconduct or cheating (Mazis Tr. 1128).

173. USR's coding department developed proposed codes after review of a portion of the open-ended questions. The codes were developed by professional coders at USR, each of whom had between six and twenty years of experience as coders. To develop the codes, the coders took samplings from each of the open-ended questions to ascertain the thoughts and ideas that respondents gave to those particular questions (Kloc Tr. 694-98). They then combined similar thoughts into categories and created a list of proposed codes. The proposed codes were then reviewed by Dr. Mazis (Mazis Tr. 1069).

174. Dr. Mazis' universe was comprised of men and women, twenty-five to seventy years old who had suffered back pain in the last six months and treated it with an OTC analgesic (CX 419-F;

Mazis Tr. 1070-71). His universe matched target audiences defined by Ciba (*see* JX 2 ¶ 27).

175. Dr. Mazis chose control ads (F 126) for analgesics which focused on back pain and excluded ads that made or implied superiority claims (Mazis Tr. 1079). He decided not to use a Doan's ad purged of superiority features, as did Dr. Jacoby in his study (Mazis Tr. 1079, 1370-72; Jacoby Tr. 2948-49).

176. The control ads were a Motrin TV commercial and an FSI for Nuprin (CX 540; CX 545).

177. The control ads did not include any references to "Extra Strength" while the Doan's ads did, but this language was unlikely to communicate a superiority claim since it was hardly visible in the tested TV ad (Mazis Tr. 1919-20). Furthermore, the "extra strength" language does not carry with it, in most cases, a superiority message (CX 419-Z-76). (*See* F 129, 130, 193.)

178. Dr. Mazis' copy test gradually filtered out those respondents who did not have anything relevant to offer, then asked the qualifying respondents a series of open-ended and close-ended questions (Mazis Tr. 1084-90).

179. USR tabulated the results of each open-ended question separately (Kloc Tr. 704; *see* CX 419-Z-29-37, Z-39-47, Z-49-55, Z-59-63). It also netted the results of all three open-ended questions for each coding category (Kloc Tr. 705-06; Mazis Tr. 1091-92). This "total ad communication" tabulation lists the total number of respondents who gave a particular response to the open-ended questions, without any double counting (Kloc Tr. 705-06).

180. For each of the two challenged ads shown to respondents in Dr. Mazis's copy test, the following is the percentage who responded in their own words to the open-ended questions (which may understate the total communication (Whitcup Tr. 2829-30)), that the ads communicated that Doan's is more effective than other pain relievers:

	"Total" open-ended communication of superior efficacy based on Q2, Q3b, and Q4b
"Activity-Playtime"	56.7%
"Why treat general aches?" FSI	40.1%

(Q2: "What does the commercial state or imply about Doan's?")

(Q3b: "What reason or reasons does the commercial state for buying Doan's?")

(Q4b: "What does the commercial state or imply about Doan's in comparison to other pain relievers?")

181. If the results of only the first two, broadest open-ended questions are tabulated, the following is the percentage of consumers who responded that the tested ads communicated that Doan's is more effective than other pain relievers:

	Open-ended communication of superior efficacy based on Q2 and Q3b
"Activity-Playtime"	39%
"Why treat general aches?" FSI	25%

(Mazis Tr. 1095-96). The open-ended responses that were coded as "more effective" for back pain included responses coded that Doan's was "better overall" or "better than other pain relievers" (RX 128-D-E; Mazis Tr. 1915-18). Respondents' expert, Dr. Jacoby, also coded "best/better" and "better than other pain relievers" to mean superior efficacy for back pain, since back pain is the subject of the ads (Jacoby Tr. 3063; Mazis Tr. 1920). This is the standard manner in which to code these responses in the context of these ads (Mazis Tr. 1920-21).

182. The magnitude of the superiority responses given in response to the open-ended questions in Dr. Mazis' copy test is extremely high and is consistent with data from the copy tests respondents performed in the ordinary course of business on other challenged ads and FSI's (Mazis Tr. 1093, 1096-97).

183. For each of the two challenged ads shown to respondents in Dr. Mazis' copy test, the following is the percentage of consumers who responded that the advertisement conveyed that Doan's was more effective than other OTC pain relievers for back pain relief in response to close-ended question 5a:

	Total close-ended communication of superior efficacy based on Q5a
"Activity-Playtime"	73.3%
"Why treat general aches?" FSI	57.9%

(Mazis Tr. 1098-99; CX 419-Z-56).

(Q. 5a: "Does the ad state or imply that Doan's is more effective than other over-the-counter pain relievers for back pain relief?")

184. To control for beliefs consumers might have that all back pain claims are akin to superiority claims and for yea saying bias, Dr. Mazis first subtracted the "yea saying" responses (consumers who responded "yes" to 5b, the headache control question) ("Does the ad state or imply that the product is more effective than other OTC products for headaches?") from the total percentage of consumers who took away a "more effective" claim from the test and control ads in response to question 5a. Dr. Mazis then subtracted the result of this calculation for the control ad from the result obtained for the test ad. The use of this double control procedure provides a conservative estimate of the superiority communication conveyed by close-ended question 5a (Mazis Tr. 1087, 1100-01).

185. The superiority playback of the tested ads from the close-ended question 5a, net of controls, is as follows:

	Close-ended communication of superior efficacy based on Q5a net of controls
"Activity-Playtime"	58.0%
"Why treat general aches?" FSI	42.7%

(Mazis Tr. 1100). This magnitude of results confirms that consumers take the challenged superiority claims from these ads (Mazis Tr. 1092).

c. Dr. Jacoby's Copy Test

186. Dr. Jacoby designed a survey on behalf of respondents for the purposes of this litigation (RX 5) which measured, in separate sections, both beliefs about Doan's and the communication of selected Doan's ads (Jacoby Tr. 2962, 2971). The belief portion of this study is discussed below. The copy testing portion of Dr. Jacoby's study measured the communication of two challenged Doan's ads, "Activity-Playtime" and "Muscles." Complaint counsel challenge Dr. Jacoby's conclusion with respect to close-ended question 8(a) ("Based on what the commercial said, showed or suggested, would you say that when it comes to relieving back pain, the advertised brand is as effective, less effective, or more effective than other brands") (RX 5-Z-61) because of "priming" by question 1(d) ("Do you believe any of the brands [of analgesics] that you mentioned [in response to questions 1a-c] is more effective for back pain than any of the other brands you mentioned") (RX 5-Z-57).

187. "Priming" refers to information given or concepts raised in earlier questions in an interview that sensitize respondents to that issue and result in respondents providing that information or concept as an answer to a later question only because they had been primed to think about it by the prior question (Mazis Tr. 1109; Jacoby Tr. 3217-18).

188. Complaint counsel claim that question 1d primed respondents to answer question 8a with the "more effective" response, with the result that the superiority claim playback could have been inflated (Mazis Tr. 1109).

189. Complaint counsel's argument may be valid, but the most significant aspect of Dr. Jacoby's study is the responses to its open-ended questions which provide the most reliable measure of ad communication that can be extracted from it (Mazis Tr. 1108-10). These questions asked for the main idea of the tested ad (Q6a) and what other points or ideas the ad communicated (Q6b).

190. These results provide reasonably reliable data which support the conclusion that the superior efficacy claim was conveyed to consumers by the "Activity-Playtime" and "Muscles" ads.

191. The data reported in RX 5 shows that 35% of the respondents who viewed the "Activity-Playtime" ad took the superior efficacy claim from it based upon their responses to the two open-

ended questions (RX 5-Z-123; Jacoby Tr. 3063-64; Mazis Tr. 1111-12). Dr. Jacoby characterized that figure as "high" (Jacoby Tr. 3065).

192. The data reported in RX 5 shows that 19% of the respondents who viewed the "Muscles" ad took the superior efficacy claim from it based upon their responses to the two open-ended questions (RX 5-Z-124; Mazis Tr. 1112).

193. In response to these open-ended questions (Questions 6a-b), only one percent of respondents exposed to the "Activity-Playtime" commercial played back a "strong/extra strength/need fewer" message, while 35% of respondents played back a superiority claim (RX 5-Z-123; Jacoby Tr. 3121-22; Mazis Tr. 1728-29). Similarly, after exposure to the challenged "Muscles" commercial, only 2% of respondents played back a "strong/extra strength/need fewer" message, while nineteen percent played back a superiority claim (RX 5-Z-124; Mazis Tr. 1728-29). These data indicate that the "Extra Strength" claim is not the reason respondents are taking a superiority message (*see* Mazis Tr. 1728, 1874, 1922).

194. Dr. Mazis undertook an independent review of the verbatims from the three open-ended questions (6a-b, 7d) in Dr. Jacoby's copy test, adding a third category entitled "Faster" because these responses are properly included in the net superior efficacy take away (Mazis Tr. 1114).

195. Netting the three coding categories across the three open-ended communication questions yields a net superior efficacy take away of 47.9% for the "Activity-Playtime" ad and 22.1% for the "Muscles" ad (CX 453-C-D; Mazis Tr. 1114-15).

d. Mr. Lavidge's Copy Test

196. Mr. Lavidge designed three studies on behalf of respondents for the purpose of this litigation (RX 23) which measured both the communication of certain Doan's ads and beliefs about Doan's (Lavidge Tr. 758-60). The belief portion of the studies is discussed below. The copy testing portion of Mr. Lavidge's studies attempted to measure the communication of the challenged "Muscles" ad and the unchallenged "New Muscles - Male" ad, immediately after exposure and eleven days later (RX 23-E).

197. Mr. Lavidge's three surveys were called Test 1, Test 2, and Test 3 (RX 23-E). Tests 1 and 2 were identical except with regard to the Doan's ad shown; Test 1 showed the challenged "Muscles" ad and

Test 2 showed the modified, "New Muscles - Male" ad. Test 3 was identical in ad exposure to Test 1, but obtained its recall and belief measures between 10 and 12 days after that exposure (Lavidge Tr. 758-59).

198. In Tests 1, 2, and 3, respondents were exposed to advertising in the same way. The Doan's ad of interest was included on a so-called "clutter tape" with three other 15-second ads for Bufferin, Advil, and Extra Strength Tylenol Aches & Strains (Lavidge Tr. 758, 844). Each of these ads only promoted the advertised analgesic for the treatment of back pain. These commercials were shown twice and in random order (Lavidge Tr. 776-77; RX 23-F). Prior to this study, Mr. Lavidge had never used the clutter tape methodology, a procedure which was necessary here because of the combination of the belief and communication studies (Lavidge Tr. 759-60, 844-46).

199. All of the ads on the clutter tapes were for OTC analgesics to treat back pain, an unusual procedure, for clutter ads never use a product in the same category as the tested ad (Mazis Tr. 1264-66; Peabody Tr. 175-77).

200. Mr. Lavidge and Mr. Peabody testified that they would not recommend the placement of a Doan's ad in a group of other OTC ads because consumers would have difficulty recalling the Doan's message (Peabody Tr. 156; Lavidge Tr. 849). Thus, their use in the copy test would confuse respondents (Mazis Tr. 1266; Lavidge Tr. 851) with the result that it would likely discourage ad recall (Mazis Tr. 1265-67). Test 3 also discouraged ad recall by delaying questioning until, on average, eleven days after exposure to the clutter tape (Mazis Tr. 1267).

201. Copy tests seeking to determine whether implied claims are made usually ask that question (Mazis Tr. 1269; Whitcup Tr. 2829). Mr. Lavidge's communication question did not do so (Mazis Tr. 1064, 1269).

202. Tests 1, 2, and 3 did not employ close-ended ad communication questions; the result may have been to miss playback of all ad claims (Whitcup Tr. 2829; Mazis Tr. 1994).

203. The use of the clutter tapes, the eleven-day recall methodology in Test 3, the lack of close-ended communication questions and the failure to ask for implied claims, resulted in an understatement of the ads' communication of superiority claims (Mazis Tr. 1265-68).

F. Substantiation Of The Superiority Claim

204. According to accepted principles of scientific and medical practice, two well-controlled clinical studies are required to establish the therapeutic superiority of an OTC analgesic over competing OTC analgesics (JX 1 ¶ 6).

205. Although the Advisory Review Panel On OTC Internal Analgesic and Antirheumatic Products and the FDA concluded that magnesium salicylate is safe and effective for the treatment of backache and other pain (Peabody Tr. 313-14), the OTC Analgesic Monograph does not state that any approved analgesic ingredient is more effective for the relief of back pain than any other approved analgesic product (CX 415-A-Z-31).

206. No studies have been conducted regarding the efficacy of any Doan's product or the exact formulation contained in any Doan's product offered for sale to the public (JX 1 ¶ 8).

207. There are no specific studies demonstrating the therapeutic superiority of magnesium salicylate over aspirin, acetaminophen, ibuprofen, or naproxen sodium for the relief of back pain, or for any other approved OTC Analgesic Monograph indications (JX 1 ¶ 9).

208. Ciba's former Vice President of Marketing stated that there are no documents or studies in existence demonstrating that magnesium salicylate relieves back pain more effectively than acetaminophen, aspirin, ibuprofen or naproxen sodium (CX 584; *see also* CX 501 at 22 [Sloan Dep.]).

209. The only scientific review Ciba conducted prior to purchasing the Doan's brand was a review of FDA's OTC Analgesics Monograph (CX 501 at 25 [Sloan Dep.]).

210. Ciba's former Vice President of Marketing testified that during the time he was responsible for Doan's he knew that advertising claims required substantiation and that, while the OTC Analgesics Monograph was sufficient to support basic efficacy claims, superiority claims would require one or two well-controlled clinical studies (CX 501 at 27-28 [Sloan Dep.]). He also stated that he never saw any scientific evidence that Doan's was more effective than other analgesics (CX 501 at 22 [Sloan Dep.]).

211. In 1989, Ciba's legal counsel and the Marketing Manager for Doan's received a memorandum from Ciba's medical division stating that "clinical studies have shown that magnesium salicylate is an effective analgesic and is comparable to aspirin" and that "there are

no clinical studies of Doan's in combination with other over-the-counter medications" (CX 71-B; CX 519-A).

212. As part of the network review process, Ciba sometimes received comments from the TV networks that the way a claim was structured might imply superiority and requesting substantiation (CX 501 at 37 [Sloan Dep.]; CX 503 at 86-91 [Jackson Dep.]). Ciba did not provide the networks with substantiation for a superiority claim and, instead, revised its ads or withdrew them from consideration (*see e.g.*, CX 166-A; CX 177-A-B; CX 212-A; CX 501 at 37 [Sloan Dep.]).

213. In a 1994 letter addressed to the then-Marketing Director for Doan's, Jordan McGrath's Senior Vice President responsible for Doan's stated:

Doan's cannot support product "superiority" . . . nor can it deliver a unique or seemingly superior consumer benefit. Hence, it's a challenge for the advertising execution to compensate and persuasively deliver a dimension of competitive "news."

(CX 169-D; CX 504 at 136 [Schaler Dep.]).

214. In a "demo exploratory" document attached to a summary of discussions between Jordan McGrath and Ciba regarding creative strategy for 1995, the agency noted:

While we would like to *imply* that Doan's provides superior efficacy because of its unique ingredient, we cannot clinically support this since the other brands work equally as well as Doan's at relieving back pain.

(emphasis in original) (CX 147-J).

G. Materiality Of The Superiority Claim

215. Dr. Jacoby's study (RX 5) analyzed the impact which the ads "Activity-Playtime" and the old "Muscles" might have on respondents' [consumers'] future purchasing behavior (Jacoby Tr. 3053; RX 5-Z-112).

216. Specifically, after exposure to the commercials, Dr. Jacoby asked respondents the following questions: "Did seeing this commercial influence whether or not you would buy the advertised product in the future?"; "Did it make you more likely to buy this product, or less likely to buy this product?"; and "What is it about what the commercial said, showed or suggested that makes you more likely to buy it in the future?" (Jacoby Tr. 3055; RX 5-Z-112-13).

217. The percentage of consumers reporting that the test ad made them more likely to buy the advertised product were as follows:

"Activity-Playtime"	25%	Advil	28%
"Muscles" (challenged)	30%	Tylenol Aches & Strains	42%
"Muscles" (new & not challenged)	35%		

(RX 5-Z to Z-8).

Based on the measurements taken from these questions, the unchallenged Doan's commercials exerted a slightly greater impact on respondents' purchase decisions than the challenged "Activity-Playtime" and "Muscles" commercials (Jacoby Tr. 3057; RX 5-Z-112-13). The fact that the unchallenged Doan's "Muscles" commercial actually exerted more impact on respondents' purchase behavior is especially telling according to Dr. Jacoby (Jacoby Tr. 3057-58). Similar to the comparison between the two "Muscles" commercials, the Tylenol control commercial had a greater impact on respondents' purchase decisions than any of the Doan's commercials that were shown (Jacoby Tr. 3059-60; RX 5-Z-112).

218. Respondents were then asked what it was about the ad that made them more likely to buy (RX 5-Z-59). In response, only 2% out of 142 (2% of the 122 nonusers of Doan's and 0% of the 20 users of Doan's) who viewed the "Activity-Playtime" commercial attributed this reaction to a supposed claim in the ad that Doan's "works better/best/more/most effective." Only 3% of the same group indicated that the positive impact on their purchase interest was due to "Activity-Playtime" saying that Doan's had a "special/unique ingredient" (Jacoby Tr. 3058; RX 5-Z-114).

219. Two percent of the respondents who viewed the old "Muscles-Male" commercial indicated that the positive impact on their purchase interest was due to the commercial saying that Doan's "works better/best/more/most effective" (Jacoby Tr. 3059; RX 5-Z-115). Two percent of the same group indicated that the positive impact on their purchase interest was due to old "Muscles" saying that Doan's had a "special/unique ingredient" (Jacoby Tr. 3059; RX 5-Z-115).

220. Based on these measurements, Dr. Jacoby testified that any alleged more effective claim in the challenged Doan's advertising did not have a positive impact on relevant consumers' interest in purchasing Doan's (Jacoby Tr. 3061).

221. He also concluded that, to the extent that respondents in the Jacoby Study who indicated that the "Activity-Playtime" commercial communicated a more effective claim, the same respondents did not believe that such a claim would positively affect their purchase behavior (Jacoby Tr. 3338-42).

222. Of the 129 respondents who viewed the old "Muscles-Male" commercial, 4.7% reported that the commercial communicated a more effective claim and that the claim exerted a material impact on their purchase intentions (Jacoby Tr. 3341; RX 209-A). After controlling for noise by subtracting the response level from the new "Muscles-Male" commercial, the net amount of respondents who thought the old "Muscles-Male" commercial communicated a more effective claim that exerted a material impact on their purchase intentions was 1.9% (Jacoby Tr. 3341; RX 209-A).

223. Of the 142 respondents who viewed the "Activity-Playtime" commercial, 12.7% reported that the commercial communicated a more effective claim and that the claim exerted a material impact on their purchase intentions (Jacoby Tr. 3340; RX 209-A). After controlling for noise by subtracting the response level from the Tylenol control commercial, the net amount of respondents who thought that the "Activity-Playtime" commercial communicated a more effective claim that exerted a material impact on their purchase intentions was 7.9% (Jacoby Tr. 3341).

224. These data, according to Dr. Jacoby, demonstrate that even to the extent that consumers may have extracted a superior efficacy claim from the "Activity-Playtime" and old "Muscles-Male" commercials, the claims were not material (Jacoby Tr. 3342-43).

225. Furthermore, Mr. Peabody testified that the ARS persuasion scores for "Black and White Pan Rev. 15," "Activity-Playtime" and "Muscles" would not generate significant sales for Doan's (Peabody Tr. 429, 437, 441-42).

226. Complaint counsel argue that the challenged ads were material because they involve information that is important to consumers and would likely affect their purchasing decisions.

227. Complaint counsel cite the following evidence in support of their claim:

The Bruno & Ridgeway copy test of "Graph" which found that the idea of "superiority" conveyed by the ad "seems to be an important and persuasive idea" to consumers (CX 224-L).

The conclusion of a market research company report discussing "Graph" which "appears to create the impression that Doan's may in fact be better than other brands, thereby promulgating a more favorable predisposition to trying Doan's" (CX 227-Z-3).

The Brand Equity study (CX 25a), (whose conclusions I reject (F 246)), shows that superior efficacy for back pain is an important attribute of OTC analgesics (Mazis Tr. 1618).

The fact that consumers were willing to pay a premium price for Doan's (F 15).

The 80% increase in Doan's dollar sales during the time the challenged ads were disseminated (JX 2 ¶ 17).

Despite the results of Dr. Jacoby's study, I am compelled by the strong presumption of materiality and the evidence cited by complaint counsel to find that the challenged ads were material.

H. The Need For Corrective Advertising

228. Complaint counsel's argument for the imposition of a corrective advertising order claims that: (1) there exists a misbelief about Doan's efficacy, (2) the misbelief was substantially created or reinforced by the challenged advertising, and (3) the misbelief is likely to linger unless respondents are compelled to engage in an advertising campaign which will correct the misapprehension created by Doan's eight year advertising campaign.

229. Complaint counsel argue that the need for corrective advertising can be inferred. They also cite three extrinsic "belief" studies -- the 1987 A&U study, the Brand Equity study, and the NFO study, in support of their argument.

230. Respondents, on the other hand, cite "advertising penetration data" as well as consumer belief studies conducted by Mr. Lavidge and Drs. Jacoby and Whitcup which, they say, lead to the conclusion that corrective advertising is not an appropriate remedy in this case.

1. The Impression Created By Doan's Ads

a. Ordinary Course Of Business Studies

(1) The ASI and ARS Tests

231. The 1990 ASI and 1991, 1993, 1994 and 1995 ARS copy tests revealed low 24 (ASI) and 72 (ARS) hour recall (2% to 8%) by respondents of a "more effective" or "good product/better/best" message (F 140, 148, 150, 155, 159).

232. Dr. Jacoby testified that if only a small percent of consumers recall a "more effective" or "good product/better/best" message within one to three days after exposure to a commercial in a test environment, it shows the absence of any widespread lingering misimpression by consumers (Jacoby Tr. 2996-97).

(2) The 1987 Attitude And Usage Study

233. In June and July 1987, Arbor, Inc., an independent consumer research provider, conducted an attitude and usage study ("A&U study") by telephone for Doan's among adults who were back pain sufferers (CX 221-I; Peabody Tr. 134). The A&U study was undertaken shortly after Ciba purchased the Doan's brand and was conducted to help Ciba understand the product category in which Doan's competed, to determine consumer awareness of the Doan's brand, and to determine the imagery and beliefs analgesic users held for Doan's and the brands with which it competed (CX 221-H; Peabody Tr. 133, 287; Mazis Tr. 979).

234. Question 22 of this study asked respondents to rate each of three selected brands of which they were aware on a list of 14 attributes, including one which stated "Is the most effective pain reliever you can buy for backaches" (CX 221-Z-120; Mazis Tr. 989-90; Peabody Tr. 141).

235. The mean results of respondents' ratings of the four brands (using a 1-7 scale) on the attribute "Is the most effective pain reliever you can buy for backaches" were: Doan's, 4.4; Extra-Strength Tylenol, 5.1; Advil, 4.8; Bayer, 4.2 (CX 221-Z-72). These ratings provide a measure of back pain sufferers/treaters' perceptions about the four brands on that attribute as of the time of the study (Peabody Tr. 141). They show that Doan's was rated below Extra-Strength Tylenol and Advil and about the same as Bayer on this attribute (*id.* at 143).

236. Ciba's marketing research department's analysis of the A&U study results concluded that "Extra-Strength Tylenol is clearly the gold standard for backache pain relief followed by Advil. Bayer and Doan's are consistently perceived weakest" (CX 221-C). That conclusion was based, in part, on the attribute rating for "Is the most effective pain reliever you can buy for backaches" (Peabody Tr. 144). The marketing research department further concluded that "Doan's has a weak image in comparison to the leading brands of analgesics

and would benefit from positioning itself as a more effective product that is strong enough for the types of backaches sufferers usually get" (CX 221-C-D).

237. The results of the Doan's A&U study were used to help create new Doan's advertising. The first new Doan's ad that was created and disseminated after Ciba's receipt of the Doan's A&U study results was the "Graph" ad (Peabody Tr. 146).

(3) The Brand Equity Study

238. In July 1993, five years after the ad campaign at issue in this case began, CLT Research Associates, Inc., an independent consumer research company, implemented a research project called the Brand Equity study for Ciba. The study was conducted, in part, to help Ciba understand the strengths and weaknesses of the Doan's brand and establish the current equity and brand image of Doan's compared to its competitors in the backache market (CX 256-C; Peabody Tr. 217; Mazis Tr. 1042).

239. One purpose of the Brand Equity study was to evaluate how Doan's was perceived on a set of attributes compared to other analgesics used to treat back pain (Mazis Tr. 1042; *see* CX 259-B-C).

240. Question 2b of the study used an answer booklet (CX 259-B; CX 260) which consisted of a list of the 21 attributes and a grid of six boxes adjacent to each of the attributes (CX 260-B). The left hand box was labeled "Unacceptable, brand couldn't be worse," the right hand box was labeled "Ideal, nothing could make brand better," and in the middle above the dividing line between the third and fourth box was the label "Good" (*id.*). Respondents were asked to rate each of a group of analgesic products they were aware of for the treatment of back pain on each of the 21 attributes using this grid (Peabody Tr. 222-23; Mazis Tr. 1047).

241. The report of the Brand Equity study does not contain a detailed discussion of the results of question 2b (Mazis Tr. 1048-49). That data was contained in CX 486 and CX 507, which were massive printouts of the Brand Equity data. CX 480 contains a summary of some of the data obtained from question 2b, taken from those computer printouts.

242. The data in CX 480 is presented separately for users and aware non-users of Doan's, Extra-Strength Tylenol, Advil, and Motrin IB. This is appropriate since it takes account of the "usage

effect" *i.e.*, the tendency of users to rate a product higher than do non-users (Mazis Tr. 992, 1055, 1158).

243. The data for both users and aware non-users in CX 480 is presented both in terms of "top box" results and "top two box" results. Top box results are the percentages of respondents giving the highest rating to the product. In this case, top box refers to the proportion marking the boxes labeled "Ideal, nothing could make brand better." Top two box results are the percentage of individuals who selected either the "Ideal" rating or the box to its immediate left. Hypothetically, if the scale were rated from one to six with the "Ideal" box given a rating of six, the top two box figures reflect the percentage of respondents who rated a product with either a five or a six (Mazis Tr. 1051).

244. The following are the ratings of users of the products on the attribute "Being particularly effective for back pain":

	Doan's	ES Tylenol	Advil	Motrin
Top Box	44.7%	20.7%	18.9%	22.6%
Top Two Box	72.7%	50.0%	41.9%	54.7%

(CX 480-A-B).

245. The following are the ratings of aware non-users of the products on the attribute "Being particularly effective for back pain":

	Doan's	ES Tylenol	Advil	Motrin
Top Box	20.0%	7.1%	5.3%	6.6%
Top Two Box	36.0%	27.1%	16.8%	23.0%

(CX 480-C-D).

246. Dr. Mazis testified that the attribute "Being particularly effective for back pain" is similar to the attribute "Is more effective than other OTC pain relievers for back pain relief" (Mazis Tr. 1058). I disagree. "Particularly effective for back pain" probably reflects consumers' association of Doan's with back pain relief. It does not necessarily imply equivalence to the phrase "more effective" and this study, therefore, is not probative on the issue of belief.

b. The NFO Belief Study

247. NFO is a marketing research company which provides mail panel research. Mail panel research involves mailing research instruments to individuals, who have previously agreed to serve as survey respondents, for them to complete and return to NFO by mail. Over 500,000 households participate in NFO research projects (Clarke Tr. 8-9).

248. NFO conducts over 3,000 consumer research studies annually using the mail panel methodology for major corporate clients, including 45 of the top 100 companies listed in the Fortune 500 (Clarke Tr. 9). Its research includes tracking studies, consumer attitude studies, advertising studies, concept studies, etc. These corporate clients, including Ciba and Novartis, rely on mail panel research by NFO and its competitors to make business decisions (Clarke Tr. 10; Peabody Tr. 203, 520-21, 196-98, 206-07, 215).

249. A NFO multi-card survey is an omnibus mailing of various questionnaires to a large group of panelists (Clarke Tr. 10). NFO mailed a multi-card questionnaire to 40,000 households (8 panels) in October 1996 on behalf of complaint counsel (Clarke Tr. 10-14; CX 420-H) and prepared a report tabulating the results of that survey (CX 420). The multi-card survey was intended to identify back pain sufferers/treaters who were Doan's users or aware non-users who could be sent a follow-up questionnaire to determine whether they held the belief that Doan's was more effective than other OTC pain relievers for back pain relief (Mazis Tr. 1118; Clarke Tr. 14).

250. None of the additional survey questionnaires that were included in the multi-card mailout with complaint counsel's questionnaire related to OTC medications or pain-related products. NFO received 30,025 completed questionnaires of the 40,000 mailed out (Clarke Tr. 18-20; CX 420-H).

251. Dr. Mazis decided to employ a mail panel to screen for Doan's users and aware non-users because it is a very cost effective method by which to locate users of a niche product like Doan's (Mazis Tr. 1117-18; Clarke Tr. 11; Peabody Tr. 518). Dr. Mazis has had experience using mail panel research and he has found it to provide useful and reliable results (Mazis Tr. 1119).

252. The survey, which was designed by Dr. Mazis (Tr. 1117), used a screening questionnaire to exclude respondents who did not meet the criteria established by him. An identical screening process

was used in Doan's Brand Equity study (Mazis Tr. 1117-20; CX 258-C). Telephone validation of the NFO screening questionnaire was not conducted because there was no interviewer in this mail panel who might engage in misconduct (Mazis Tr. 1128).

253. In December 1996, NFO conducted a follow-up study for complaint counsel to assess beliefs of Doan's users and aware non-users (CX 421-H; Clarke Tr. 32; Mazis Tr. 1121-22, 1129). The sample of this survey consisted of 400 Doan's users and 400 Doan's aware non-users selected on a random basis from the larger population of both groups identified in the multi-card screening survey (Mazis Tr. 1130; Clarke Tr. 34-35). Dr. Mazis excluded consumers unaware of Doan's from his study because they do not hold any opinions about the product (Mazis Tr. 1122). Mr. Peabody confirmed the importance of obtaining data from users of Doan's (Peabody Tr. 377, 398).

254. At the time he designed the NFO belief study, Dr. Mazis planned to analyze the data that he obtained by comparing the belief measures of (1) users of Doan's to users of other analgesics for back plain relief, and (2) aware non-users of Doan's to aware non-users of other analgesics. The purpose of such matched comparisons was to take into account and control for the usage effect (Mazis Tr. 1129, 1158, 1199-1201). Novartis' expert statistician agreed that this sort of paired analysis is appropriate and necessary to remove the impact of the usage effect (Jaccard Tr. 1527-28; *accord* Lavidge Tr. 879).

255. The belief questionnaire presented to the respondents ten attribute statements, including "Is more effective than other over-the-counter pain relievers for back pain relief" (CX 421-Z-12; Mazis Tr. 1131) as well as "Has an ingredient for back pain" and "Is just for back pain." The remaining belief statements were included so as not to focus undue attention on the belief measures of interest, resulting in a list which was unbiased (Mazis Tr. 1134-35).

256. About 20% of respondents gave inconsistent answers, agreeing that the same product was both just for headaches and just for back pain, but Dr. Jaccard agreed that this was no cause for concern about responses to other survey questions (Jaccard Tr. 1539).

257. NFO's analysis of its belief study (CX 421-N-W) was recalculated by Dr. Mazis to exclude those respondents (38) who were unaware of any analgesic other than Doan's. This made the results of the NFO study more balanced (CX 481; Mazis Tr. 1139-40).

258. The results for three belief statements, "Is more effective than other over-the-counter pain relievers for back pain relief," "Has an ingredient especially for back pain," and "Is just for back pain" are summarized in CX 482 (Mazis Tr. 1147-51). That summary contains an aggregation of the percentages of respondents who agreed with each of those belief statements for each product by combining the data for the "strongly agree," "agree," and "somewhat agree" responses (*id.* at 1148). That data is reported both for users of each product and for aware non-users of each product (CX 482). The results for the belief statement "Is more effective than other over-the-counter pain relievers for back pain relief" are as follows:

	Doan's	Advil	Aleve	Bayer	Motrin	Tylenol
Users	77%	62%	51%	41%	61%	43%
Non-Users	45%	31%	20%	17%	35%	22%

(CX 482).

259. Users of a brand tend to have more favorable beliefs about brands they use. It is inappropriate to look at the overall ratings for each brand by the whole sample regardless of usage, because usage behavior can exert influences on perceptions (Jaccard Tr. 1528). To account for this usage effect, one must compare the beliefs of users of Doan's to the beliefs of users of the other brands. Similarly, the beliefs of Doan's aware non-users must be compared to the beliefs of aware non-users of the other brands. Dr. Mazis conducted a statistical analysis of the NFO data to account for the usage effect.

260. For each of the five comparison analgesic products, Advil, Aleve, Bayer, Motrin, and Tylenol, Dr. Mazis' analysis looked at the subgroup of individuals who used that brand and Doan's ("joint users") (CX 424-A-Z-25; CX 422-A-F; Mazis Tr. 1158-59). Then, for each set of joint users of Doan's and a comparison product, he compared those individuals' beliefs about Doan's to their beliefs about that comparison product (a "user-to-user comparison"). For example, one of the analyses looked at individuals in the NFO sample who used both Advil and Doan's and compared their beliefs about Advil to their beliefs about Doan's (Mazis Tr. 1159-61). A similar analysis was done for each set of joint users (*e.g.*, Aleve and Doan's joint users) (Mazis Tr. 1158-59, 1199-1201). Dr. Mazis conducted a

similar analysis for aware non-users (CX 424-A-Z-25; CX 422-A-F; Mazis Tr. 1159).

261. Dr. Mazis' analysis focused on whether respondents agreed or did not agree that a brand they rated "is more effective than other over-the-counter pain relievers for back pain relief." If the respondent either "strongly agreed," "agreed," or "somewhat agreed" on the seven-point scale, they were treated as an "agreer." If he or she "strongly disagreed," "disagreed," "somewhat disagreed," or "neither agreed or disagreed," that respondent was treated as a "non-agreer." The analysis concentrated on the percentages or proportions of joint users and joint aware non-users "agreeing" that a product was more effective for back pain than other OTC analgesics (Mazis Tr. 1162-63).

262. The following table presents the percentages of joint users who agreed that Doan's or another of the five comparison brands was more effective than other OTC pain relievers for back pain relief.

Among joint users of both Doan's and comparison brand	Doan's is more effective than other OTC pain relievers for back pain relief	Comparison brand is more effective than other OTC pain relievers for back pain relief	Difference in % agreeing
Doan's & Advil	74%	57%	17%
Doan's & Aleve	77%	46%	31%
Doan's & Bayer	70%	33%	37%
Doan's & Motrin	72%	54%	18%
Doan's & Tylenol	76%	48%	28%

(CX 424-Z-16-20; CX 422-E-F; *see* Mazis Tr. 1171-73).

263. On average, the proportions of joint users agreeing that Doan's is more effective for back pain than other OTC analgesics is 26% higher than the proportions agreeing that the other brands are more effective (Mazis Tr. 1173-74).

264. The following table presents the percentages of joint aware non-users who agreed that Doan's or another of the five comparison brands was more effective than other OTC pain relievers for back pain relief.

Among those aware of both Doan's and comparison brand but who use neither	Doan's is more effective than other OTC pain relievers for back pain relief	Comparison brand is more effective than other OTC pain relievers for back pain relief	Difference in % agreeing
Doan's & Advil	43%	30%	13%
Doan's & Aleve	41%	19%	22%
Doan's & Bayer	47%	14%	33%
Doan's & Motrin	39%	35%	4%
Doan's & Tylenol	42%	17%	25%

(CX 424-Z-16-20; CX 422-E-F; Mazis Tr. 1175-76).

265. On average, the proportions of joint aware non-users agreeing that Doan's is more effective for back pain than other OTC analgesics was 20% higher than the proportions agreeing that the other brands were more effective (Mazis Tr. 1176).

266. Dr. Mazis conducted a statistical analysis to determine whether the differences in beliefs about Doan's and other brands could have occurred by chance (Mazis Tr. 1178-81).

267. A statistical significance test determines whether the "null hypothesis" of no real difference is rejected. For example, in this case the null hypothesis might be that the proportion of joint users who believe Doan's is superior for back pain is not different than the proportion believing other brands superior. If the null hypothesis is rejected, one concludes that the observed difference is real and did not occur by chance (Mazis Tr. 1178-81; Jaccard Tr. 1421-22).

268. Usually, statistical analysis accepts a result, *i.e.*, rejects the null hypothesis, when the likelihood of that result occurring by chance is less than five percent (Mazis Tr. 1178-79, 1181; Jaccard Tr. 1489). This is referred to as a "p value" of less than .05 (Mazis Tr. 1178-79). The p value is also known as an "alpha level" (Jaccard Tr. 1488-89). Dr. Mazis used .05 as the p value for his analysis of the NFO belief study data (Mazis Tr. 1182).

269. Dr. Mazis's analysis of the NFO belief study data used a "two-tailed" statistical significance test to measure the p value rather than a "one-tailed" approach (Mazis Tr. 1180; Jaccard Tr. 1487).

270. A "two-tailed" test is equally concerned about a difference in either direction, *e.g.*, whether the percentage of joint users believing Doan's is superior is statistically significantly higher or lower than the percentage believing that the other product is superior (Mazis Tr. 1182). A "one-tailed" test is only concerned with a difference in one pre-determined direction (Mazis Tr. 1183; Jaccard Tr. 1486).

271. A two-tailed test is more conservative than a one-tailed test because using the former makes it more difficult to achieve a p value of .05 or less and, therefore, more difficult to conclude that there is a real difference (Mazis Tr. 1180-81; Jaccard Tr. 1488).

272. Because the issue in this proceeding is only whether there is a disproportionate belief that Doan's is more effective, a one-tailed test would have been appropriate (Mazis Tr. 1183). Dr. Jaccard agreed that the hypothesis at issue is concerned only with a result in that one direction and testified that it might be appropriate to use a one-tailed test to analyze the NFO data (Jaccard Tr. 1485-88).

273. Dr. Mazis calculated that all of the observed differences in the user-to-user comparison for the attribute "more effective for back pain" were statistically significant at the .05 level, as were the p values for four of the five aware non-user to aware non-user comparisons for the attribute "more effective for back pain" (CX 424-Z-16-20; CX 422-E-F; Mazis Tr. 1187-89; Jaccard Tr. 1496-98).

274. Dr. Mazis also analyzed the NFO data by applying the so-called Bonferroni adjustment to correct for experiment-wise error which may occur when statistical analyses involve hypotheses based on multiple statistical tests (Mazis Tr. 1190-94). Even after making these adjustments, the results were not that much different than in his other analysis (Mazis Tr. 1195-96).

275. There is often more than one acceptable statistical model for analyzing a data set (Mazis Tr. 1163; Jaccard Tr. 1484). Dr. Mazis used a repeated measures loglinear statistical analysis to analyze the NFO belief study data (Mazis Tr. 1157). Dr. Jaccard, who has used the loglinear approach to analyze data in his research, reanalyzed the NFO belief study data using a statistical analysis based on the general linear model which makes the assumption that the distribution of the difference scores has "normal" bell-shaped distribution (Mazis Tr. 1166-67; Jaccard Tr. 1484). If the data are not normally

distributed, the results of an analysis based on the general linear model may be unreliable (Jaccard Tr. 1532-33).

276. The results of Dr. Jaccard's re-analysis of the NFO belief study data using the general linear model and mean ratings are consistent with the loglinear model analyses conducted by Dr. Mazis (Mazis Tr. 1839, 1845-46). The loglinear and general linear analyses are also consistent after applying a Bonferroni adjustment for experiment-wise error (Jaccard Tr. 1510; Mazis Tr. 1845-46).

277. Dr. Jaccard also criticized Dr. Mazis' loglinear analysis for collapsing his scale into "agrees v. non-agrees" (Jaccard Tr. 1423-25) rather than using mean scales but other researchers have used this procedure (Peabody Tr. 142-43; Jaccard Tr. 1520-21; Whitcup Tr. 2846-48).

c. Respondents' Belief Studies

(1) The Jacoby Study

278. Dr. Jacoby designed a survey for this litigation to determine whether consumers believe that Doan's is superior in efficacy for back pain relief and, if so, whether the belief arose from Doan's advertising (RX 5).

279. Dr. Jacoby's study included some respondents who were not back pain sufferers and who were unaware of Doan's (Jacoby Tr. 2959, 3138-39, 3140; Mazis Tr. 1120; Lavidge Tr. 770; Whitcup Tr. 2109).

280. Although those who were unaware of Doan's could not express an opinion about its efficacy, Dr. Jacoby included them because they were potential purchasers (Jacoby Tr. 3139, 3377-78).

281. Dr. Jacoby also excluded Doan's non-users (79% of the respondents) because they would have no basis for forming efficacy beliefs except from personal use (Jacoby Tr. 3151).

282. Other exclusions of some respondents for questions about efficacy probably resulted in understatement of those who would have expressed efficacy opinions (RX 5-Z-56-57; Jacoby Tr. 2963, 2965, 3153-54, 2989; Mazis Tr. 1297, 1274-75).

283. Despite these flaws, complaint counsel rely on results of the Jacoby study which indicates that 38% of the Doan's users in the sample believed that Doan's is more effective for the relief of back pain, whereas 23% of Advil users and 17% of Tylenol users believed their brand is superior. Dr. Mazis testified that the results of user-to-

user comparisons are consistent with the results of the 1993 Brand Equity study and the NFO belief study, which demonstrated that there is a clear, long-term, disproportionately strong belief that Doan's is more effective for back pain than other pain relievers (Mazis Tr. 1155-57).

284. The survey's questionnaire also presents some problems. Question 1f was an open-ended question directed to respondents who stated that a particular brand was more effective than others for back pain in response to questions 1d-e. It asked those respondents to tell the interviewer what made them say that brand was more effective (RX 5-Z-57). The interviewer was permitted to follow-up only once with the probe, "Anything else" (Jacoby Tr. 3158-59). Dr. Jacoby acknowledged that limiting the interviewer to one follow-up probe would not fully capture all of the reasons some respondents had for believing one brand was more effective than another. He also agreed that for open-ended questions in this study that he believed to be important, he permitted unlimited probing by the interviewer (Jacoby Tr. 3158-60, 2974-75).

285. In response to question 1f, 8% of the respondents who had previously identified Doan's as more effective for the treatment of back pain gave advertising as a reason they held that belief (RX 5-Z-107), but Dr. Mazis testified that this was not an insignificant amount (Mazis Tr. 1299-1300) given the fact that some consumers are reluctant to admit that they are influenced by advertising (Whitcup Tr. 2805-06; Lavidge Tr. 890-91); furthermore, it is a well known marketing principle that consumers are often not aware that their views are shaped by advertising (Mazis Tr. 1300-03; Lavidge Tr. 890-91; Jacoby Tr. 3194).

286. Dr. Jacoby concluded that the superiority beliefs elicited in his survey for Doan's, Advil and Tylenol were caused by past product usage and not the lingering effects of advertising (RX 5-Z-106; Jacoby Tr. 2984-85). He based this conclusion on the fact that 218 of 220 respondents (99%) who said one of those brands was superior in efficacy for back pain in response to question 1e were users of those brands. However, this result occurred in part because of the design of question 1d which excluded non-users (RX 5-Z-56-57).

287. Question 2b asked users of a particular brand why they used that brand. Eleven percent cited advertising as the reason (Jacoby Tr. 3209-11; RX 5-Z-58). Some of this response may be due to the fact

that Doan's users had a stronger recall of Doan's ads than did users of Tylenol or Advil (Jacoby Tr. 3209-11). Also, the 11% of Doan's users who cited advertising was higher than the 1% or less who cited advertising as the reason they used Tylenol or Advil (*see* RX 5-Z-109).

288. Question 3b asked those respondents who recalled advertising for a brand to state what the advertising communicated. Based on the fact that only 3% of the Doan's users gave responses that were coded as a superior efficacy claim, Dr. Jacoby concluded that there were few, if any, lingering effects of advertising related to the challenged claim (RX 5-Z-58), although he agreed at trial that the fact that respondents played back a general recall of Doan's ads, does not establish that they did not form a superiority belief from their exposure to Doan's ads (Jacoby Tr. 3208-09; *see also* Mazis Tr. 2017-19). He also agreed that people who see an ad can have beliefs based on the ad, hold those beliefs and yet not recall the ad (Jacoby Tr. 3201).

(2) The Whitcup Study

289. Dr. Whitcup designed a survey for this litigation to determine whether consumers believe that Doan's is superior in efficacy for back pain relief and whether any such belief arose from Doan's advertising (RX 2).

290. The universe for Dr. Whitcup's survey consisted of men and women aged 18 and older who were back pain sufferers/treaters within the past year (Whitcup Tr. 2109-10; RX 2-Z-8-10). He did not exclude back pain sufferers/treaters who were unaware of Doan's for the treatment of back pain (Whitcup Tr. 2111). According to Dr. Mazis, this made the universe over inclusive (Mazis Tr. 1273).

291. Dr. Whitcup did not supplement his sample, with the result that only 35 Doan's users were in it, compared with 190 Tylenol users and 121 Advil users (RX 2-Z-49).

292. As a result of the small number of Doan's users in his study, Dr. Whitcup added the letter "c" ("caution small base") whenever he presented data based on their responses (RX 2-Z-49; RX 2-Q-S, V-W, Z-1).

293. In contrast, Mr. Peabody testified that when Doan's marketing research department wanted to analyze the responses of Doan's users in a consumer research study, it sought a large enough

sample to perform a proper analysis (preferably at least 100 Doan's users per cell) (Peabody Tr. 297).

294. Dr. Mazis testified that because of the small number of Doan's users in this study, the usage effect resulted in understatement of the superiority beliefs for Doan's (Mazis Tr. 1290-91), making the data unreliable. Questions 1a-b and 1c-d, did not mention back pain, with the result that respondents were primed to think of all-purpose rather than back pain drugs, thus causing an understatement of Doan's awareness caused by advertising (Mazis Tr. 1280-81).

295. The main reason given -- that Dr. Whitcup did not want to poison respondents' minds (Whitcup Tr. 2148-49) -- did not dissuade other experts from referring to "back pain" in their screening questionnaires (CX 420-Z-34; RX 23-Z-398; RX 5-Z-6), although Dr. Jacoby stated that asking respondents first about awareness or use of OTC analgesics for back pain would not poison their minds (Jacoby Tr. 3146).

296. Based upon unaided questions 1c-d of his questionnaire, Dr. Whitcup concluded that awareness of Doan's ads is virtually nil and that they are unmemorable (RX 2-Z-3; *see* Whitcup Tr. 2160) but Dr. Mazis concluded that, because of priming, they understate respondents' recollection of Doan's advertising (Mazis Tr. 1647). Furthermore, Dr. Whitcup acknowledged that a respondent's failure to mention Doan's ads on an unaided basis does not mean that they were unaware of Doan's ads (Whitcup Tr. 1280-81).

297. Question 1f asked respondents who had indicated that they used multiple brands to treat back pain which brand they used most often (RX 2-Z-11). Question 2 asked respondents, if they used only one brand of pain reliever to treat back pain, why they used that brand (*id.* at Z-12). If respondents used more than one brand, they were only asked question 2 with regard to the brand they used most often (*id.*). Thus, if a Doan's user used another brand more often, he or she was not asked why they used Doan's. This design resulted in question 2 not fully eliciting the magnitude of the belief among the few Doan's users surveyed that Doan's is more effective for back pain relief (Mazis Tr. 1283; Whitcup Tr. 2789). Dr. Whitcup agreed that the underlying questionnaires contain examples of Doan's users who were not asked question 2 but who responded to later questions that Doan's was more effective than other pain relievers for back pain

relief but he argued that most respondents did not mention superiority (Whitcup Tr. 2790-95).

298. Dr. Mazis concluded, after analyzing the questionnaire, that it biased the outcome toward understating the playback of Doan's related information (Mazis Tr. 1289).

(3) The Lavidge Study

299. Mr. Lavidge designed a survey for this litigation to determine what claims the "Muscles" ad conveyed and whether consumers held a belief that Doan's was superior in efficacy for back pain relief (RX 23).

300. Mr. Lavidge did not limit the universe in this study to Doan's users and aware non-users (Lavidge Tr. 755-56; *see* RX 23-Z-395-98); he included respondents who were not aware of Doan's because they were potential purchasers (Lavidge Tr. 755-56), but Dr. Mazis testified that a belief study for a niche brand like Doan's should not include respondents who are unaware of the product, and thus could have no beliefs about it (Mazis Tr. 1273). The data collected in this survey shows that 71% of the sample were unaware of Doan's for the treatment of back pain (RX 182). In contrast, 79% of the sample were aware of (and 70% used) Tylenol; and 68% were aware of (and 59% used) Advil (RX 182). The inclusion of respondents who were unaware of Doan's caused different awareness rates and made it impossible to determine if there is a disproportionate belief regarding Doan's (Mazis Tr. 1273, 1279).

301. Mr. Lavidge's copy test asked belief questions subsequent to the viewing of a clutter tape which included the challenged "Muscles" ad (CX 23) (Tests 1 and 3) or the "New Muscles - Male" ad (RX 24-A) (Test 2) and three other 15-second ads for analgesic products being promoted for back pain relief. Question 13, which was asked after two exposures to the clutter reel, purports to measure beliefs about product efficacy.

302. Exposure to the Doan's ad in the midst of a clutter tape containing three similar back pain-oriented ads for other analgesics does not reflect how consumers are exposed to Doan's ads in natural surroundings (Peabody Tr. 156; Lavidge Tr. 849).

303. The appropriate way to measure whether lingering beliefs exist is to measure them without exposure to an ad (Mazis Tr. 1276). Dr. Jacoby repeatedly testified with regard to the belief study portion

of his methodology that lingering beliefs cannot properly be measured after exposure to an ad (Jacoby Tr. 2962, 2968, 3155).

304. The belief question (13a) began by asking respondents "Do you think any non-prescription pain killer product is more effective in relieving back pain than the other non-prescription products which are sold for that purpose, or don't you have an opinion about that?" For respondents who answered affirmatively, question 13b was asked: "Which non-prescription product do you think is more effective than others in relieving back pain?" This was followed by a question asking what respondents thought made that product more effective (RX 23-Z-401).

305. Question 13a does not provide respondents with a list of brands to be rated on the more effective for back pain attribute, or any other attributes (*id.*; see RX 23-Z-401). This requires respondents to sort through a mental list, a processing requirement that is difficult for many consumers to perform. This form of questioning can result in an understatement of consumer beliefs (Mazis Tr. 1274-76).

306. A better way of asking such a question is to ask respondents what their beliefs are for a list of brands with regard to certain attributes, as was done in the A&U study, the Brand Equity study, and the NFO belief study (Mazis Tr. 1274-75). This procedure is the one most commonly used in the consumer research industry (Mazis Tr. 1274; Peabody Tr. 412).

307. Question 13a uses the term "any non-prescription pain killer product" and 13b uses the term "which non-prescription product" (RX 23-Z-401; Lavidge Tr. 889). Mr. Lavidge acknowledged that the term "product" in both questions was singular and that he was asking respondents to identify only one product they believed to be more effective (Lavidge Tr. 889-90). This question is flawed because it limits respondents to giving only one product when they may believe that more than one are more effective. This is particularly limiting for a niche product such as Doan's, which could be one of multiple products a respondent believes to be more effective, but does not come immediately to mind (Mazis Tr. 1275-76).

308. Novartis' other consumer research experts recognized the problem inherent in such a limitation and permitted respondents to provide multiple products in response to their belief question (RX 2-Z-13; Whitcup Tr. 2811; RX 5-Z-57; Jacoby Tr. 3158). Dr. Whitcup testified that 15% of the respondents answering his belief question

identified multiple brands (Whitcup Tr. 2811). The singular wording of the term "product" in questions 13a-b of the Lavidge study may have resulted in those questions understating the number of products that respondents believed to be more effective for the treatment of back pain.

309. Because there were only a small number of Doan's users in Mr. Lavidge's study, the usage effect probably resulted in the superiority beliefs for Doan's being understated according to Dr. Mazis (Mazis Tr. 1271, 1291).

310. The presentation of the data in the Lavidge study does not break down the superiority belief into those held by users of each product or aware non-users of each product (Mazis Tr. 1271; *see id.* at 1291). Such comparisons are the only reliable way to equalize any usage effects (Mazis Tr. 1158-59, 1199-1200; Jaccard Tr. 1528-29). There is no reliable data or data analysis in RX 23 that permits one to draw any conclusions regarding the existence of a superior efficacy belief with regard to the Doan's product (Mazis Tr. 1272-73; *see id.* at 1295-96). Mr. Lavidge acknowledged this at the hearing (Lavidge Tr. 879).

d. The Creation Of Consumer Misbelief By The Challenged Ads

311. The NFO Belief study shows that Doan's ad campaign created a consumer misbelief about the efficacy of Doan's -- *i.e.*, that Doan's is more effective than other OTC analgesics for the relief of back pain.

312. That belief, however, has no significance unless complaint counsel establish that it has been substantially created or reinforced by the challenged ads (CPF 314).

313. Factors other than advertising, such as experience, word-of-mouth, doctor recommendations and packaging may have played some role in consumer belief about the efficacy of Doan's (Mazis Tr. 1606-09; CX 502 at 123-24 [Wright Dep.]; Lavidge Tr. 750-52; RX 179), but the evidence leads to the conclusion that advertising was also a factor in the creation of that belief (Mazis Tr. 1201-02, 1609; Stewart Tr. 3468-69).

314. The purpose of Doan's ads was to convince consumers that it was superior to other OTC analgesics for relieving back pain and, to that end, Ciba spent \$55 million from 1988 through 1996 for Doan's broadcast ads and \$10 million for consumer promotions (JX 2 ¶ 21).

315. Doan's is a "niche" product which competes in the back pain segment of the OTC analgesics market and its ads target that audience (Stewart Tr. 3478; CX 501 at 68 [Sloan Dep.]). Marketers using niche ads can reach their intended audience with less ad dollars than marketers who target a broader audience (Stewart Tr. 3476, 3478).

316. Doan's ad agencies estimated that it reached between 80 and 90% of its target audience 20 to 27 times per year between 1988 and 1996 (JX 2 ¶ 25; Stewart Tr. 3413-14).

317. For most of the period in which the challenged Doan's ads were aired, Ciba used a "flighting" strategy. Flighting is a common method of scheduling in which the advertiser is on the air for a period of time, and off the air for other periods (Stewart Tr. 3421). Ciba started flighting in 1991 "to increase visibility and reach in order to attract additional users to the brand" (CX 514-C; Stewart Tr. 3420). Flighting works especially well for niche brands if the advertiser's objective is both to persuade new users to try the brand and to reinforce the preferences of current users (Stewart Tr. 3422).

318. Ciba produced 15-second rather than 30-second ads for Doan's after it acquired the brand (JX 2 ¶ 25; CX 508-Z-13). Ingrid Nagy, who was Doan's Business Unit Manager from 1988-1991 and its Marketing Director from 1994-1995, believed that the 15-second format was an effective strategy for Doan's ad campaign (CX 499 at 135 [Nagy Dep.]).

319. One means of determining whether a 15-second ad is as effective as a 30-second ad is to test it in a copy test (Stewart Tr. 3446-47, 3461-62; CX 506 at 87-88 [M. Seiden Dep.]). If a 15-second ad performs as well as a 30-second ad, it makes sense to use it because it costs half as much (Stewart Tr. 3449; CX 506 at 87-88 [M. Seiden Dep.]).

320. Ciba tested the first ad it created for Doan's, "Graph," through an ASI test. It achieved a 19% recall score (Stewart Tr. 3448; CX 335-Z-7). This exceeded the average (or "norm") for 15-second ads for drug and health products by 5% (CX 335-Z-7; CX 120-C). The score equaled the norm for the average 30-second ad in the drug and health products category (Stewart Tr. 3448-49; Peabody Tr. 258; CX 335-Z-7; Mazis Tr. 2010), indicating that "Graph" was as memorable as the typical 30-second ad in the category (Stewart Tr. 3448-49; Mazis Tr. 2010-11).

321. Ciba tested the second ad it created for Doan's, "Black & White Back," through ASI. This ad also achieved a related recall score of 19% (RX 98-F).

322. Another Doan's ad, "Ruin A Night's Sleep," was tested by ARS in 1991 and achieved a recall score of 42%, 19% above the category average (RX 89-L; Mazis Tr. 2008-09). "Black & White Back Pan" was tested by ARS in 1993 and achieved a recall score of 38%, 15% above the average of the OTC analgesics category. "Activity-Playtime" was tested by ARS in 1994 and achieved a recall score of 34%, 11% above the average (Stewart Tr. 3452-53; CX 393-Z-30). "Muscles" was tested by ARS in 1995 and achieved a recall score of 45%, 22% above the average (*id.*; Peabody Tr. 196).

323. Dr. Stewart testified that these ARS recall scores indicate that the tested 15-second Doan's ads were more memorable than the average for the category, which is calculated mostly from 30-second ads (Stewart Tr. 3449, 3452-53), and he concluded that Ciba's use of 15-second ads for Doan's was a very effective strategy (Stewart Tr. 3462).

324. Dr. Jacoby's study (RX 5) shows that the Doan's advertising campaign was memorable among back pain sufferers/treaters when compared to the more extensive advertising campaigns for Advil and Tylenol during the same period. In the Jacoby study, before exposure to any test ad, respondents were asked about their recall of ads for the brands they used (RX 5-Z-58). Fifty-two percent of Doan's users said they recalled Doan's advertising (RX 5-Z-111) but only 3% of them recalled any superiority claim in Doan's ads (Jacoby Tr. 2996).

325. Dr. Stewart testified that the only way to differentiate Doan's and affect its market performance is through advertising; and, in fact, the Doan's brand group and its ad agency frequently referred to Doan's as an ad-driven brand (Stewart Tr. 3468). Other statements by Doan's employees and its ad agency confirm that the brand is advertising sensitive (CX 335-D; Peabody Tr. 257; CX 514-C; CX 499 at 82 [Nagy Dep.]; CX 120-A; CX 497 at 38 [Esayian Dep.]; CX 407-A; CX 496 at 104-05 [Caputo Dep.]).

326. Other Ciba documents refer to the crucial role advertising played in the marketing of Doan's and in driving Doan's sales (CX 404-A-B; CX 499-A). The "Doan's 1996 1st Half Brand Update" states: "Doan's support continues to drive strong volume and share performance despite competitive activity." This document also states

that "Doan's advertising has historically improved category performance, as well as Doan's share/volume."

327. Mr. Peabody testified that Doan's P.M. sales were "very sensitive to advertising" (Peabody Tr. 566; *see also* CX 157-B; Peabody Tr. 567; CX 185-E; CX 504 at 138 [Schaler Dep.]; Peabody Tr. 626-27; CX 144-B).

328. ARS also tested "Ruin A Night's Sleep," "Black & White Back," "Activity Playtime," and "Muscles" for persuasion (CX 393-Z-30; RX 98; RX 32; RX 33; CX 265). The persuasion measure is calculated based on the test respondents' choice of a "prize" grocery basket of products the respondents select prior to and after the one hour of "pilot" television shows they view. In calculating the persuasion score, ARS takes additional factors into account, such as the number of competitors in the product category and the degree of switching in the category. Persuasion scores can be negative or positive; a positive score reflects the fact that the ad is having a net persuasive effect on the market, over and beyond what one might expect given various marketplace conditions (Peabody Tr. 191-93; Stewart Tr. 345-52).

329. All of the Doan's ads tested by ARS received positive scores, ranging from 1.5 for "Activity-Playtime" to 6.8 for "Ruin A Night's Sleep" (CX 393-Z-30; RX 89-K). All of the tested ads would be expected to have a net persuasive effect on the market (Stewart Tr. 3452).

330. Dr. Stewart testified that Doan's competes in the analgesics market, which is a "mature market." In such markets, it is difficult to persuade long-time customers to switch brands on the basis of one exposure to a competing ad. For a niche brand in the category, the persuasion scores achieved by the Doan's ads were quite good (Stewart Tr. 3452).

331. The ad which achieved the lowest, but still net positive persuasion score, "Activity Playtime," was very successful in generating sales for Doan's. In this instance the persuasion score was not a good predictor of what occurred in the real world (CX 504 at 55-57, 138 [Schaler Dep.]; Stewart Tr. 3472).

332. Between 1987, when Ciba bought the brand, and 1996, Doan's factory sales have increased by approximately 80%, from \$10.2 million to a high of \$18.9 million in 1994 (with a small drop from 1994 to 1995) (JX 2 ¶ 17; Mazis Tr. 2026; Stewart Tr. 3469;

Peabody Tr. 141-42). Consumer sales, which were first tracked in 1992, rose from \$21.5 million in 1992 to \$23.3 million in 1995.

333. Consumer sales of Doan's products increased at approximately the same rate as consumer sales of all analgesic products between 1992 and 1995 (JX 2 ¶¶ 16, 19; Stewart Tr. 3481). This parallel growth occurred even though advertising spending for all analgesic products increased by almost one third during this period, while advertising expenditures for Doan's remained relatively constant (JX 2 ¶¶ 21, 23). Doan's successfully maintained its sales without increasing advertising expenditures by focusing effectively on its niche of back pain sufferers (Stewart Tr. 3481-82).

334. The "contribution" for a brand refers to the amount it contributes to Ciba's profits. "Contribution" is calculated by subtracting the brand's expenses from its sales (CX 496 at 93 [Caputo Dep.]). Doan's contribution to Ciba's profits remained relatively constant between 1990 and 1997, delivering approximately 22 to 25% of sales as contribution (Peabody Tr. 549-50). This percentage equaled or exceeded the contribution from Ciba's other OTC pharmaceutical brands (CX 496 at 93 [Caputo Dep.]; CX 401-A-B).

335. In "mature" product categories such as analgesics, a central purpose of advertising is to retain current users. This is because the overall market for the products in the category may not be growing appreciably. In these categories, sales increases are not the only measure of the success of an advertising campaign. A key criterion for success of the advertising is whether it is succeeding in maintaining share, particularly in the case of a competitive onslaught (Stewart Tr. 3467; Mazis Tr. 1202; CX 597).

336. Since Ciba acquired Doan's, several new entrants have entered the back pain specific category (which consists of analgesics that are marketed only for back pain) and the general analgesics category (CX 393-R; CX 97-B). Despite these competitive pressures, Doan's was able to maintain and even increase its sales (Stewart Tr. 3468).

337. Doan's responded to these competitive entries partially through the use of advertising (Stewart Tr. 3434-37; Mazis Tr. 2028-32). When Nuprin Backache was introduced in the first half of 1993, Ciba's media planners increased Doan's television advertising budget by approximately \$500,000 to respond to this competitive threat (CX 357-B; Mazis Tr. 2033-34; Stewart Tr. 3434). Similarly, when Bayer Select Backache was introduced, Ciba increased spending to

run more advertising during the introductory period for Bayer Select (CX 378-K; Stewart Tr. 3434-35). Doan's Marketing Director wrote that both the Nuprin Backache and Bayer Select Backache products were unsuccessful because Doan's used a "consistent, strong advertising campaign to defend and even build share in the face of these competitors" (CX 399-B). Both products had been withdrawn from the market by 1996 (CX 496 at 24 [Caputo Dep.]).

338. At the time that Aleve was being introduced in mid-1994, Ciba directed its advertising agency to include the Aleve package in the competitive "set" in the "Activity" commercials that were then being produced. Ciba carefully tracked the entry of Aleve and consulted with its advertising agency regarding the most appropriate ways to defend Doan's during Aleve's introduction (CX 168-A-M).

339. Drs. Mazis and Stewart testified that the numerous references in the Doan's marketing and strategy documents to the fact that the brand is advertising driven, indicates that the challenged ads must have played an important role in sustaining and growing the Doan's brand (Mazis Tr. 2026; Stewart Tr. 3408-09).

340. It is not surprising that the challenged ads were successful, because academic research has shown that ads for low share brands which include explicit comparative references to high share brands in the same category are very effective. Such ads succeed in attracting more attention to the low share brand and increase purchase intention for the low share brand relative to the high share brand. This comparative reference strategy was employed in all of the challenged Doan's ads (Stewart Tr. 3458-61; CX 595-A-L; CX 596-A-I).

341. The advertising campaign for Doan's was a highly successful one for a niche brand (Stewart Tr. 3485).

342. Dr. Stewart testified that the ad expenditures for Doan's, the media strategies employed, and the type of ads that were used, created or reinforced consumers' beliefs that Doan's is more effective than other analgesics for back pain (Stewart Tr. 3485-86).

*e. Consumer Research Into The Creation
Of The Superiority Belief*

343. The NFO study shows that more Doan's users and aware non-users believe that Doan's is superior for back pain than do those users and aware non-users of other brands who believe those brands are superior (CPF 347-52, 395-429). The similarity in the beliefs of

users and aware non-users is evidence that Doan's advertising played a role in creating and reinforcing that superiority belief, since by definition the beliefs of aware non-users about Doan's stem from factors other than their usage experiences with the product (Mazis Tr. 1203-08; CX 502 at 123-25 [Wright Dep.]). And, the superiority beliefs among Doan's users cannot be explained by usage experience because of the inability of consumers to evaluate the comparative efficiency of analgesics (CPF 546-47).

344. Further evidence that advertising created or reinforced superiority beliefs is that Doan's users and aware non-users have beliefs that track other claims conveyed by Doan's advertising -- Doan's "has an ingredient especially for back pain" and "just for back pain" (Mazis Tr. 1210-18).

345. The NFO belief study demonstrates that there is a strong and disproportionate belief among both Doan's users and Doan's aware non-users that Doan's "has an ingredient especially for back pain" and "is just for back pain." In that study, survey respondents rated their levels of agreement or disagreement with these attributes for each of the brands of OTC back pain relievers of which they were aware (CX 422-A-D).

346. Dr. Mazis conducted the same statistical paired comparison analyses regarding these attributes, looking at joint users and joint aware non-users, that he conducted for the attribute "more effective for back pain than other OTC analgesics" (CX 424-G-K, Q-U; CX 422-D; Mazis Tr. 1208). Across the five user-to-user comparisons, the proportions of joint users agreeing that Doan's "has an ingredient especially for back pain" is on average 54% higher than the proportions agreeing that each of the other brands (Advil, Aleve, Bayer, Motrin, or Tylenol) has that attribute (*see* CX 424-A-U; CX 422-C-D). Across the five aware non-user-to-aware non-user comparisons, the proportions agreeing that Doan's "has an ingredient especially for back pain" is on average 46% higher than the proportions agreeing that each of the other brands has that attribute. For the attribute "just for back pain," on average 62% more joint users and 54% more joint aware non-users agreed that Doan's has that attribute (*see* CX 424-G-K; CX 422-A-B). Each of the differences in beliefs among every user-to-user and aware non-user-to-aware non-user comparison is large and highly statistically significant (Mazis Tr. 1209).

347. The eight year advertising campaign claiming that Doan's "has an ingredient especially for back pain" and that it "is just for back pain" played a substantial role in the creation or reinforcement of beliefs that mirror those claims (Mazis Tr. 1217). Mr. Peabody testified that Doan's advertising is likely one of the sources of the beliefs that Doan's "has an ingredient especially for back pain" and that it "is just for back pain" (Peabody Tr. 226-28) and Dr. Mazis concluded that consumers would not infer that a product had a special ingredient for back pain simply from the fact it is only advertised and marketed for back pain (Mazis Tr. 1621). The fact that the ads created beliefs consistent with these claims further supports the conclusion that they played a role in creating or reinforcing the belief that Doan's is more effective for back pain than other OTC analgesics (Mazis Tr. 1217; *see id.* at 1057-58; *see also* CX 480-A-D; Mazis Tr. 1054-58 (1993 Brand Equity Study)).

348. The 1987 A&U study and the 1996 NFO belief study measured the beliefs of users and aware non-users of Doan's, Extra-Strength Tylenol, Advil, and Bayer regarding the product attribute "most effective" (the A&U study) and "more effective" than other OTC pain relievers for back pain relief (CX 421-Z-12; CPF 383).

349. Since the A&U study was conducted just before the challenged ads were disseminated (CPF 326, 336), Dr. Mazis felt that comparing its results with those of NFO's 1993 belief study, which took place six months after they were abandoned, would permit him to determine if beliefs among users and non-users of these products had changed over the years and to measure the impact of the Doan's ad campaign on consumer beliefs (Mazis Tr. 1219-20).

350. I agree with respondents' experts that Dr. Mazis' comparison of these two studies is unsound since there are a number of differences in the methodologies and questions used in the 1987 A&U study and 1996 NFO study that could be responsible for the change in reported attribute ratings (Jaccard Tr. 1461-73; RX 133-B-E).

351. These include: (1) a difference in the wording of the key attribute in the two studies (CX 221-Z-120; CX 421-Z-12); (2) differences in the structure of the studies' questionnaires (Jaccard Tr. 1462-71); (3) differences in the response dimensions (how much attributes "applied" to a brand v. how much respondents "agreed" that the attributes described the tested brands) (Jaccard Tr. 1465; RX 133-B); and, (4) differences in the studies' response scales (Jaccard Tr. 1465-67; Jacoby Tr. 3021-22; RX 133-C).

352. The methodologies of the studies were also different. The 1987 A&U study was a telephone survey; the NFO study was a mail survey (Jaccard Tr. 1468-69; RX 133-C).

353. Finally, the samples in the two studies differed in terms of the nature of respondents' back pain (*i.e.*, suffered "in an average six month period" versus "on a regular basis"), the usual type of treatment (*i.e.*, "prescription or non-prescription medication" versus "over-the-counter medication"), and respondents' role in the purchase of the treatment product. Other key demographic variables -- such as age, gender, income, education, occupation, geographic location, and household size -- are not specified in the 1987 A&U study and could have varied from the demographics of the sample surveyed in the 1996 NFO Mail study. These many differences between the samples of respondents surveyed in the two studies could account for the discrepancy in respondents' attribute ratings (Jaccard Tr. 1470-71; RX 133-D, D)

354. Given the many differences in the questions, response dimensions, response scales, methodology, and samples in the 1987 A&U study and the 1996 NFO Mail study, I find that the attempted comparison of the two studies to draw inferences regarding the impact of the challenged advertising on consumer beliefs has no methodological merit (Jaccard Tr. 1577-78; RX 133-A).

f. The Lingering Effect Of The Challenged Ads

355. The challenged ads which were widely disseminated for several years communicated a message which created a disproportionate belief in the target audiences that Doan's is superior to other OTC analgesics for back pain.

356. Dr. Jacoby testified about the lingering effects of advertising in *American Home Prods.*, 98 FTC 283 (Initial Decision). He stated that beliefs concerning attributes that had been stressed in analgesic product ads can endure long after they have ceased (*American Home Prods.*, 98 FTC at 293 (IDF 592) (Initial Decision). Dr. Jacoby also testified that among users of an analgesic product that was advertised as superior to its competitors, that superiority belief would linger long after the cessation of the advertising because product usage will continually reinforce that image (*id.* at 284).

357. The NFO belief study was conducted in December 1996, six to seven months after the last challenged ad was disseminated (Mazis Tr. 1254-55; CX 421-H; JX 2 ¶ 25), and it shows, according to

Dr. Mazis, that a strong superior efficacy belief lingered, and is likely to linger (Mazis Tr. 1254-55).

358. Dr. Mazis' conclusion is echoed by three empirical studies of the lingering effect of ads. The first study, authored by Kinnear, Taylor and Gur-Arie, was a follow-up study of the effect of a Commission corrective advertising order in *RJR Foods, Inc.*, 83 FTC 7 (1973). The purpose of the study was to measure the change in consumers' beliefs regarding the fruit juice content of Hawaiian Punch (Mazis Tr. 1257-59; CX 536-N-O).

359. This research continued for eight and one-half years (Mazis Tr. 1259; CX 536-N) and found that the percentage of the tested population that held the factually correct belief, the result the corrective advertising was intended to achieve, increased from 20% to 40% in a year's time, improved to 50% by the fifth year, and increased to 70% after eight years. This data shows that advertising based beliefs that are imbedded in consumers' minds can last a very long time, even in the face of corrective advertising. Such ad-created beliefs would have remained at even higher levels for a longer period of time, if the challenged advertising had ceased and no corrective advertising was required (Mazis Tr. 1259-61).

360. Two studies of the corrective advertising order in Listerine -- one conducted by Armstrong, Russ, and Gurol and the other by Dr. Mazis, -- tracked the effect of the corrective advertising requirement over time. These studies showed a reduction of between 11% and 20% in the false beliefs over the course of the approximately one and one-half year corrective advertising effort, according to Dr. Mazis, and support the conclusion that embedded advertising-based beliefs do not change quickly, even in the face of corrective advertising (Mazis Tr. 1261-63).

III. CONCLUSIONS OF LAW

A. Introduction

Doan's has been marketed for over 90 years. Ciba purchased the Doan's brand in early 1987 for approximately \$35 million because it believed that Doan's could be successfully marketed if its old fashioned image could be changed (F 8-10).

The so-called Attitude & Usage study ("A&U") which was conducted for Ciba shortly after its purchase of Doan's tested consumer awareness of Doan's and its competitors (F 233). Among

other things, the study concluded that Doan's should position itself "as a more effective product." The results of this study convinced Ciba to embark on the eight year comparative ad campaign which featured the challenged ads (F 236-37).

B. The Challenged Ads Conveyed The Superiority Claims

1. Legal Standard

Section 5 of the FTC Act prohibits material and deceptive representations or omissions which are likely to mislead reasonable consumers into unwarranted beliefs about the advertised product. *Cliffdale Associates, Inc.*, 103 FTC 110, 164-65 (1984). *Appeal dismissed sub nom. Koven v. FTC* No. 84-5337 (11th Cir. Oct. 10, 1984) ("Deception Statement").

The Commission deems an ad to convey a claim if consumers, acting reasonably under the circumstances, would interpret it to convey that claim, even if a challenged, misleading claim is accompanied in the same ad by non-misleading claims. *Kraft, Inc.*, 114 FTC 40, 120 n.9 (1991), *aff'd*, 970 F.2d 311 (7th Cir. 1992), *cert. denied*, 507 U.S. 909 (1993); *Thompson Medical*, 104 FTC at 789 n.7, 818 (1984).

Both express and implied ads may be deceptive, *Fedders Corp. v. FTC*, 529 F. 2d 1398, 1402-03 (2nd Cir.), *cert. denied*, 429 U.S. 818 (1977), and intent to convey a claim need not be established, *Kraft, Inc.*, 114 FTC at 121; however, if an advertiser intends to make a claim, it is reasonable to conclude that the ads make that claim. *Thompson Medical*, 104 FTC at 791.

2. Facial Analysis

Despite Dr. Jacoby's and respondents' argument to the contrary (F 97), the Commission has often held that facial analysis of a challenged ad may be the basis for concluding that it conveys a challenged claim to consumers, and that extrinsic evidence of its meaning is not necessary. *Kraft, Inc.*, 114 FTC at 121; *Thompson Medical*, 104 FTC at 789.

Facial analysis of the challenged ads supports the conclusion that they make a claim of superior efficacy by referring to Doan's as the "back specialist" which has an ingredient not found in competing analgesics (F 88-89, 91, 93). See *American Home Products Corp. v. Johnson & Johnson*, 654 F. Supp. 568 (S.D.N.Y. 1987).

Dr. Mazis also concluded that several of the challenged ads made the superiority claim. For example, he testified that the "Graph" ad, which refers to an "ingredient that [other] pain relievers don't have" conveys the message that Doan's is unique and different, and coupling the claim with references to back pain, conveys the net impression that Doan's is more effective for back pain relief than other pain relievers mentioned in the ad (F 98).

3. Copy Test Evidence

Methodologically sound copy tests of challenged ads are often resorted to as evidence of the messages which they convey. *Thompson Medical*, 104 FTC at 790.

The parties rely on two kinds of copy tests: Those which were conducted in the ordinary course of business by or for Ciba, and those which were designed and administered for purposes of this proceeding.

Prior to their dissemination, the "Graph," "Black & White Back" and "Ruin A Night's Sleep" ads were copy tested by Bruno & Ridgeway, a consumer research company.

If its "main idea" and "other idea" questions are netted, the copy test of the "Graph" ad indicates that 38% of respondents exposed to it were coded as answering that it communicates the claim that Doan's was "Superior to other products" (F 122), a quite high response to open-ended questions (F 124). *Stouffer Food Corp.*, Dkt 9250 (Sept. 26, 1994).

The "Black & White Back" copy test found that 46% of the respondents who saw this ad gave answers that were coded as "superiority over other products." If responses to all of the open-ended questions are netted, 62% of the respondents took away a superior efficacy claim (F 137-38).

The copy test for the "Ruin A Night's Sleep" ad produced similar results: 25% of respondents gave answers that were coded "superiority over other products" (F 146).

The 1991 copy test of the challenged FSI's revealed that between 47% and 59% of respondents strongly or somewhat agreed that Doan's is better for back pain than other pain relievers, a response whose magnitude confirms that the claim was conveyed (F 168-69). See *Thompson Medical*, 104 FTC at 797, 805-06 (22% of those

viewing the ad believed Aspercreme contained aspirin). *See also Warner-Lambert*, 86 FTC 1398, 1504 (1975).

U.S. Research conducted a mall test of a Doan's ad, "Activity-Playtime" and an FSI. Fifty-seven percent of the "Activity-Playtime" and 40% of the FSI respondents took the superior efficacy claim from these ads (F 180). *See also* F 181, 183, 185.

The part of Dr. Jacoby's copy test for respondents which measured the communication of the challenged ads "Activity-Playtime" and "Muscles" showed that 35% of the respondents viewing "Activity-Playtime" and 19% of those viewing "Muscles" took away the superiority claim from open-ended questions (F 191-92).

The results of the copy tests relied on by complaint counsel provide solid evidence that the challenged ads conveyed the superiority message, as did Ciba's dissemination of ads which it knew conveyed a false superior efficacy claim. *ABSI*, Dkt 9275, slip op. at 40 (March 3, 1997); *Thompson Medical*, 104 FTC at 791. (If an advertiser intends to make a particular claim, it is reasonable to interpret the ads as making that claim.) Furthermore, the ads were a significant factor in creating the superiority belief (F 342). *Warner-Lambert*, 86 FTC at 1503.

C. The Superior Efficacy Claim Is Unsubstantiated

The parties have stipulated that two well controlled clinical studies are required to substantiate a superiority claim for an analgesic like Doan's. JX 1 ¶¶ 6, 9; *see Thompson Medical*, 104 FTC at 822-825. The parties also stipulated that there are no scientific studies demonstrating the therapeutic superiority of magnesium salicylate (Doan's active ingredient) over aspirin, acetaminophen (the active ingredient in Tylenol), ibuprofen (the active ingredient in Advil and Motrin) or naproxen sodium (the active ingredient in Aleve) for the relief of back pain. JX 1 ¶ 9. Nothing in the FDA analgesics monograph supports the superior efficacy of magnesium salicylate. Respondents knew that they possessed no substantiation for the superior efficacy claim (F 101, 102, 103).

D. The Superior Efficacy Claim Is Material

For deception to occur the challenged representation or omission must be material, *i.e.*, likely to affect consumer choice or conduct with respect to a product.

Respondents' ads make claims regarding the efficacy or comparative efficacy of Doan's. They may be considered presumptively material because they relate to the central characteristics of that product, Deception Statement, 103 FTC at 182, because they involve an important health claim, *Kraft, Inc.*, 114 FTC at 135-36, and because respondents intended to make a superior efficacy claim (F 104).

E. Corrective Advertising Is Not Warranted

In *Warner-Lambert*, 86 FTC at 1499-1500, the only litigated case in which corrective advertising was ordered, the Commission stated with respect to Listerine's forty-year deceptive ad campaign:

[I]f a deceptive advertisement has played a substantial role in creating or reinforcing in the public's mind a false and material belief which lives on after the false advertising ceases, there is clear and continuing injury to competition and to the consuming public as consumers continue to make purchasing decisions based on the false belief. Since the injury cannot be averted by merely requiring respondent to cease disseminating the advertisement, we may appropriately order respondent to take affirmative action designed to terminate the otherwise continuing ill effects of the advertisement. 86 FTC at 1499-1500.

There is strong academic support for the imposition of corrective ads in the appropriate circumstances (F 356, 358-60), and the NFO belief study shows that a superior efficacy belief lingered for six months after the last challenged ad was disseminated (F 357).

However, given the difference between the length of time that the false Doan's and Listerine ads ran, there is no certainty that the belief at issue requires corrective advertising and I reject Dr. Mazis' contrary conclusion (F 357) as well as complaint counsel's claim that the need for a corrective advertising order can be inferred.

In fact, there are indications in the record that the belief in Doan's superiority may be transitory.

The ASI and ARS copy tests reveal low 24 and 72 hour recall (2% to 8%) by respondents of a "more effective" or a "good product/better/best" message (F 231-32) and Dr. Jacoby testified that this shows that the ads did not create any widespread, lingering

misimpression by consumers. Dr. Whitcup and Dr. Stewart testified that Doan's ads were not memorable, a further indication that the effect of the ads which they analyzed will not linger for a substantial period of time (F 162, 296)

That the remedy sought by complaint counsel is drastic² is shown by the Commission's failure to enter a corrective advertising order in cases where some or all of the conditions for doing so existed. See e.g., *Bristol Myers Co.*, 102 FTC at 21 (1983), *aff'd*, 738 F.2d 554 (2d Cir. 1984), *cert. denied*, 469 U.S. 1189 (1985); *Sterling Drug, Inc.*, 102 FTC 395 (1983), *aff'd*, 741 F.2d 1146 (9th Cir. 1984), *cert. denied*, 470 U.S. 1084 (1985); *American Home Prods. Corp.*, 98 FTC 136 (1981), *aff'd as modified*, 695 F.2d 681 (3d Cir. 1982).

The parties agree that not every case of deception warrants corrective advertising: some unique circumstances must exist before that remedy is adopted. Complaint counsel have not shown what is memorable about an ad campaign, which, while successful in retaining market share (F 333), created no significant increase in sales (JX 2-B, ¶¶ 16, 19; Scheffman Tr. 2543-46).

I therefore reject corrective advertising as an appropriate remedy in this case.

F. The Appropriate Order

1. Introduction

Because respondents' violations were serious, deliberate, and transferable, a comprehensive "fencing-in" order is appropriate. See *Thompson Medical*, 104 FTC at 843-44.

2. The Violations Were Serious And Deliberate

The challenged ads ran for eight years and were extensively disseminated (F 23). Total expenditures of the campaign were sizeable -- \$55 million for broadcast advertising and \$10 million for consumer promotions (JX 2 ¶ 21).

²

Although both corrective advertising and affirmative disclosure are forms of fencing-in relief ..., the standard for imposing corrective advertising is significantly more stringent than that for an affirmative disclosure [which] requires only that the disclosure be 'reasonably related' to the alleged violations. In my view, it is important to distinguish between corrective advertising and affirmative disclosures because the Commission should not evade the more demanding standard for corrective advertising where it is clearly applicable.

California SunCare, Inc., 61 Fed. Reg. 64521, at 64523-24 (Dec. 5, 1996) (Statement of Commissioner Roscoe B. Starek, III) (concurring in part, dissenting in part).

The challenged claims were health related and consumers suffered economic injury because Doan's products are significantly more expensive than other OTC analgesics (F 15).

Consumers could not evaluate the efficacy of Doan's and could not make informed decisions about purchasing the product. *Thompson Medical*, 104 FTC at 834; *American Home Prods v. FTC*, 695 F.2d at 707.

Ciba's violations were serious and deliberate, for it designed ads which it knew would convey a superiority message which was unsubstantiated (F 100-113).

3. The Violations Are Transferable

Ciba's violations -- false and unsubstantiated superiority claims -- are transferable to other OTC analgesics and an order prohibiting transference is appropriate. *Sears & Roebuck*, 676 F.2d at 394-95.

4. The Injunctive Provisions Of The Notice Order

The injunctive provisions of the proposed order are necessary and appropriate to address respondents' violations.

Part I of the proposed order addresses the specific violation in this case, requiring competent and reliable scientific substantiation for any claim that any OTC analgesic is more effective than any other OTC analgesic for pain relief. It specifies that the substantiation required for these claims must include at least two well-controlled clinical studies. This is the appropriate standard for comparative efficacy claims for OTC analgesics. *Thompson Medical*, 104 FTC at 821-26, 832.

Part II of the proposed order contains the fencing-in relief, prohibiting unsubstantiated efficacy, safety, benefits, or performance claims for any OTC analgesic-drug.

Part III of the proposed order contains a "safe harbor" provision for claims approved by FDA under a tentative or final monograph, or pursuant to an approved new drug application.

Parts IV-VIII consist of standard compliance, record keeping and sunset provisions.

IV. SUMMARY

A. The Federal Trade Commission has jurisdiction over the advertising of Doan's analgesic products under Sections 5 and 12 of the Federal Trade Commission Act.

B. Respondents disseminated advertisements for Doan's analgesic products that falsely represented to reasonable consumers that Doan's analgesics products are more effective than other analgesics for relieving back pain.

C. At the time respondents made these representations, they did not possess or rely upon a reasonable basis that substantiated such representations.

D. Respondents' representations were material.

E. The acts and practices of respondents as herein found were all to the prejudice and injury of the public and constitute unfair and deceptive acts and practices and false advertisements in or affecting commerce in violation of Sections 5 and 12 of the Federal Trade Commission Act.

F. The accompanying order is necessary and appropriate under applicable legal precedent and the facts of this case.

ORDER

For purposes of this order:

1. "*Doan's*" shall mean any over-the-counter analgesic drug, as "drug" is defined in the Federal Trade Commission Act, bearing the Doan's brand name, including, but not limited to, Regular Strength Doan's analgesic, Extra Strength Doan's analgesic, and Extra Strength Doan's P.M. analgesic.

2. "*Competent and reliable scientific evidence*" shall mean tests, analyses, research, studies, or other evidence based on the expertise of professionals in the relevant area, that has been conducted and evaluated in an objective manner by persons qualified to do so, using procedures generally accepted in the profession to yield accurate and reliable results.

3. "*Advertisement*" shall mean any written, oral or electronic statement, illustration or depiction which is designed to create interest in the purchasing of, impart information about the attributes of, publicize the availability of, or effect the sale or use of goods or services, whether it appears in a brochure, newspaper, magazine, free standing insert, marketing kit, leaflet, circular, mailer, book insert,

letter, catalogue, poster, chart, billboard, public transit card, point-of-purchase display, package insert, package label, product instructions, electronic mail, website, homepage, film, slide, radio, television, cable television, program-length commercial or "informercial," or in any other medium.

I.

It is ordered, That respondents Novartis Corporation, and Novartis Consumer Health, Inc., corporations, their successors and assigns, and their officers, agents, representatives and employees, directly or through any corporation, subsidiary, division or other device, in connection with the manufacturing, labeling, advertising, promotion, offering for sale, sale, or distribution of Doan's or any other over-the-counter analgesic drug, in or affecting commerce, as "drug" and "commerce" are defined in the Federal Trade Commission Act, do forthwith cease and desist from representing, in any manner, directly or by implication, that such product is more effective than other over-the-counter analgesic drugs for relieving back pain or any other particular kind of pain, unless, at the time of making such representation, respondents possess and rely upon competent and reliable scientific evidence that substantiates the representation. For purposes of Part I of this order, "competent and reliable scientific evidence" shall include at least two adequate and well-controlled, double-blinded clinical studies which conform to acceptable designs and protocols and are conducted by different persons, each of whom is qualified by training and experience to conduct such studies, independently of each other.

II.

It is further ordered, That respondents Novartis Corporation, and Novartis Consumer Health, Inc., corporations, their successors and assigns, and their officers, agents, representatives and employees, directly or through any corporation, subsidiary, division or other device, in connection with the manufacturing, labeling, advertising, promotion, offering for sale, sale, or distribution of any over-the-counter analgesic drug in or affecting commerce, as "drug" and "commerce" are defined in the Federal Trade Commission Act, do forthwith cease and desist from making any representation, in any manner, directly or by implication, regarding such product's efficacy,

safety, benefits, or performance, unless, at the time of making such representation, respondents possess and rely upon competent and reliable scientific evidence that substantiates the representation.

III.

Nothing in this order shall prohibit respondents from making any representation for any drug that is permitted in labeling for any such drug under any tentative final or final standard promulgated by the Food and Drug Administration, or under any new drug application approved by the Food and Drug Administration.

IV.

It is further ordered, That for a period of five (5) years after the last date of dissemination of any representation covered by this order, respondents, or their successors and assigns, shall maintain and upon request make available to the Federal Trade Commission for inspection and copying:

A. All materials that were relied upon in disseminating such representations; and

B. All tests, reports, studies, surveys, demonstrations or other evidence in their possession or control that contradict, qualify, or call into question such representation, or the basis relied upon for such representation, including complaints from consumers.

V.

It is further ordered, That respondents shall:

A. Within thirty (30) days from the date of entry of this order, provide a copy of this order to each of their current principals, officers, directors and managers, and to all personnel, agents, and representatives having sales, advertising, or policy responsibility with respect to the subject matter of this order; and

B. For a period of ten (10) years from the date of entry of this order, provide a copy of this order to each of their future principals, officers, directors, and managers, and to all personnel, agents, and representatives having sales, advertising, or policy responsibility with respect to the subject matter of this order who are associated with them or any subsidiary, successor, or assign, within three (3) days after the person assumes his or her position.

VI.

It is further ordered, That respondents shall notify the Commission at least thirty (30) days prior to any proposed change in their corporate structures, including, but not limited to, dissolution, assignment, or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or affiliates, or any other corporate change that may affect compliance obligations arising out of this order.

VII.

It is further ordered, That this order will terminate twenty (20) years from the date of its issuance, or twenty (20) years from the most recent date that the United States or the Federal Trade Commission files a complaint (with or without an accompanying consent decree) in federal court alleging any violation of the order, whichever comes later; provided, however, that the filing of such a complaint will not affect the duration of:

A. Any paragraph in this order that terminates in less than twenty (20) years;

B. This order's application to any respondent that is not named as a defendant in such complaint; and

C. This order if such complaint is filed after the order has terminated pursuant to this paragraph.

Provided further, that if such complaint is dismissed or a federal court rules that the respondents did not violate any provision of the order, and the dismissal or ruling is either not appealed or upheld on appeal, then the order will terminate according to this paragraph as though the complaint was never filed, except that the order will not terminate between the date such complaint is filed and the later of the deadline for appealing such dismissal or ruling and the date such dismissal or ruling is upheld on appeal.

VIII.

It is further ordered, That respondents shall, within sixty (60) days from the date of entry of this order, and at such other times as the Federal Trade Commission may require, file with the Commission a report, in writing, setting forth in detail the manner and form in which they have complied with this order.

OPINION OF THE COMMISSION

BY ANTHONY, *Commissioner*:

This case is about a company that chose to market an over-the-counter ("OTC") analgesic by advertising that the product was superior to others in the treatment of back pain without any basis for that claim. Respondents Novartis Corporation and Novartis Consumer Health, Inc.¹ (collectively "Novartis") appeal from an Initial Decision and Order of Administrative Law Judge Lewis F. Parker (the "ALJ"), holding that superiority claims in advertisements for Doan's products were material and therefore deceptive in violation of Sections 5 and 12 of the Federal Trade Commission Act, 15 U.S.C. 45, 52. Complaint counsel cross-appeals the ALJ's decision not to order a corrective advertising remedy.

We affirm the ALJ's holding that the unsubstantiated superior efficacy claims for back pain relief were material and thus deceptive. We reverse the ALJ's holding regarding corrective advertising. We agree with the ALJ's findings and conclusions to the extent that they are consistent with those set forth in this opinion, and, except as noted herein, adopt them as our own.²

I. FACTUAL BACKGROUND

Novartis Corporation is a New York corporation and Novartis Consumer Health, Inc. is a Delaware corporation. Both are subsidiaries of Novartis AG, a Swiss corporation, and successors-in-interest to Ciba-Geigy Corporation and Ciba Self-Medication, Inc. (collectively "Ciba").³ JX 2A ¶ 11.⁴ In addition

¹ Novartis is the successor-in-interest to Ciba-Geigy Corporation and Ciba Self-Medication, Inc. On April 23, 1997 the ALJ issued an order, pursuant to the agreement of the parties, substituting Novartis for Ciba as respondent in this proceeding.

² We are in general agreement with the dissent regarding the applicable legal standards. The disagreements are over differing interpretations of the evidence.

³ Ciba acquired the Doan's brand from DEP Corporation in early 1987. DEP Corporation had acquired the brand from Jeffrey Martin, Inc. shortly before. JX 2A ¶ 12. From January 1987 to December 1994, Ciba was responsible for the marketing and advertising of Doan's analgesic products. In December 1994, Ciba transferred the Doan's line of products to CSM, a wholly-owned subsidiary. CSM was responsible for the marketing and advertising of Doan's analgesic products from December 1994 to March 1997. JX 2A ¶ 13.

⁴ References to the record are abbreviated as follows:

IDF	Initial Decision Finding	JX	Joint Exhibit
ID	Initial Decision	RAB	Respondents' Appeal Brief
Tr.	Transcript of Trial Testimony	CCAB	Complaint Counsel's Answering and Cross-Appeal Brief
CX	Complaint Counsel's Exhibit	RRAB	Respondents' Reply and Answering Brief
RX	Respondents' Exhibit	CCRB	Complaint Counsel's Reply Brief

to the Doan's line, Novartis manufactures and sells other OTC products.⁵

Doan's has been marketed and sold for over 90 years and has always been advertised as a backache product. IDF 8; Peabody Tr. 286. The active analgesic ingredient in the Doan's products is magnesium salicylate. IDF 14; JX 1 ¶ 11. While no other brand of OTC analgesic contains magnesium salicylate as an active ingredient, IDF 22; Peabody Tr. 314, there are no scientific studies demonstrating that magnesium salicylate is more efficacious than other analgesics. IDF 22; JX 1 ¶ 9. The Food and Drug Administration (the "FDA") regulates product labeling for Doan's pursuant to its *Tentative Final Monograph on Internal Analgesic, Antipyretic, Antirheumatic Products for Over-the-Counter Human Use* (the "Monograph"). Under the Monograph, an OTC analgesic drug may be labeled as indicated for the temporary relief of minor aches and pain associated with one or more of the following: cold, sore throat, headache, toothache, muscular aches, backaches, and arthritis. JX 1 ¶ 5.

Doan's is a relatively small player in a large market. In 1987, the total advertising spending for all OTC analgesic products was \$299 million; for the first half of 1996 it was \$351.1 million. JX 2D ¶ 23. Doan's advertising expenditures were a small fraction (1 to 3%) of the total analgesic advertising spending from 1988 to 1996. JX 2E ¶ 24. Between 1988 and 1994, Doan's share of the back pain advertising spending ranged from 8 to 12%. *Id.* Doan's analgesic products sell at a significant price premium over general purpose analgesic products at both the factory level (the retailer's purchase price) and the retail level (the consumer's purchase price). IDF 15.

After Ciba acquired the Doan's line in 1987, it commissioned a study, the Attitude and Usage Telephone Study (the "A&U Study"), CX 221, to find out how consumers perceived Doan's and to direct future marketing efforts. *See* Peabody Tr. 133-34. The A&U Study surveyed users of the Doan's product and non-users who were aware of the product. After analyzing the results of the A&U Study, Ciba's Marketing Research Department concluded that "Doan's has a weak image in comparison to the leading brands of analgesics and *would benefit from positioning itself as a more effective product* that is

⁵ These products include Ascription, Ciba Vision, Desenex, Dulcolax, ExLax, Gas-X, Habitrol, Maalox, Sunkist Vitamin C, Tavist-D, Theraflu, and Triaminic. IDF 5.

strong enough for the types of backaches sufferers usually get." CX 221-c,d (emphasis added). It further concluded that "Extra-Strength Tylenol is clearly the gold standard for backache pain relief followed by Advil. Bayer and Doan's are consistently perceived weakest." CX 221-c.

Ciba used the results from the A&U Study to create a new Doan's advertising strategy. Peabody Tr. 146. The strategy of this new campaign was to compare Doan's to other general analgesics. Comparative claims for small-share niche brands like Doan's are especially effective according to one of complaint counsel's experts, Dr. David Stewart. Stewart Tr. 3457. Specifically, Dr. Stewart explained that explicit comparative references made by low-share brands attract more attention to, and increased purchase intention for the low-share brand relative to the high share brand. Stewart Tr. 3458-59.

Ciba's marketing plans showed that its goals were to maintain its existing customers, to regain lapsed users and, of course, to attract new users. *See* CX 335-z-12; CX 343-z-65; CX 351-z-59. In the fourth quarter of 1987, Ciba introduced "Extra Strength Doan's," containing a larger dose of the active analgesic ingredient, and renamed the original product "Regular Strength Doan's." After its introduction, the Extra Strength product captured more than half of the Doan's product sales. JX 2B ¶18. In September 1991, Ciba introduced Doan's P.M., which contains a sleep aid.

Increasingly, Doan's faced competition from new back pain products, general analgesics, and private label brands. *See* CX 335-d; CX 343-f; CX 351-c; Peabody Tr. 146. The marketing plans outlined strategies to deal with such competition. For example, in August 1992, Ketchum Advertising prepared a "Doan's Defense Plan" intended to respond to the anticipated 1993 introduction of Nuprin Backache. *See* CX 357. The 1996 Marketing Plan reports that in 1994 Ciba regained its 1993 loss. CX 400-h.

To send its message, Ciba used national television ads and, to a lesser extent, free standing inserts ("FSIs"). Ciba disseminated FSIs in Sunday newspaper supplements two to three times per year. JX 2I ¶36. From 1987 through 1996, Ciba spent \$55 million for broadcast ads and \$10 million for FSIs. JX 2C ¶21. Doan's television ads appeared nationally both on network television and on syndicated and cable television. *See* JX 2F ¶28. The television ads were 15-second commercials. JX 2E ¶25. Ingrid Nagy, Doan's Business Unit Manager

from 1988 to 1991 and its Marketing Director from 1994 to 1995, believed that 15-second ads were effective because of the fairly singular communication point of the ads. IDF 29; CX 499 at 135 [Nagy Dep.]. In addition, Ciba disseminated the television ads through a flighting strategy⁶ during 26 weeks of the year. Based on estimates by Ciba's advertising agencies, from 1988 to 1996, television commercials for Doan's reached 80% to 90% of the Doan's target audience, on average, between 20 and 27 times per year. JX 2F ¶28. Finally, for short periods in 1991 and 1993, Ciba tested radio ads including Spanish radio ads in Houston. JX 2I ¶¶34, 35.

II. PROCEDURAL BACKGROUND

On June 21, 1996, the Federal Trade Commission (the "Commission") issued a complaint alleging that Ciba had violated Section 5 by making unsubstantiated claims in its advertisements (1) that Doan's analgesic products were more effective than other analgesics, including Bayer, Advil, Tylenol, Aleve, and Motrin, for relieving back pain; and (2) that Ciba possessed and relied upon a reasonable basis to substantiate such claims. During litigation, complaint counsel sought an order requiring that the following corrective notice appear on all advertising and packaging: "Although Doan's is an effective pain reliever, there is no evidence that Doan's is more effective than other pain relievers for back pain."⁷ Complaint counsel sought to impose a performance standard for determining when the corrective notice was no longer needed. Specifically, the corrective notice would appear until Ciba (now Novartis) submitted consumer survey data to the Commission demonstrating that consumer beliefs had reached a specified level.⁸

After extensive discovery and an administrative trial, the ALJ issued his Initial Decision and Order on March 9, 1998. The ALJ found that a facial analysis of the challenged advertisements supports the conclusion that the advertisements conveyed a claim of superior

⁶ In contrast to ads that are aired every week, flights are ads that air for several weeks and then are off the air for several weeks. Peabody Tr. 130.

⁷ For TV, radio, or other broadcast advertisements, Novartis would have the option of substituting either of the following corrective notices: "There is no evidence that Doan's is more effective for back pain relief than other over-the-counter pain relievers;" or "There is no evidence that Doan's is more effective than other pain relievers for back pain."

⁸ The performance standard was modeled after the 1996 NFO belief study relied upon by complaint counsel in this litigation.

efficacy for the treatment of back pain. The ALJ concluded that the Doan's superior efficacy claims were presumptively material because they relate to the central characteristics of the product and involve health claims. He also found that the claims cause consumers economic injury because the Doan's products are significantly more expensive than other OTC analgesics. He therefore held the superiority claims to be deceptive in violation of 15 U.S.C. 45 and 52. Further, the ALJ concluded that Ciba intended to make the challenged claims. ID at 63-66.

The ALJ's order prohibits Novartis from making superiority claims for any OTC analgesic drug with regard to the product's ability to relieve back pain or any other particular kind of pain without competent and reliable scientific evidence that includes at least two adequate and well-controlled, double-blinded clinical studies. (Part I) As fencing-in relief, the ALJ's order prohibits Novartis from making any representation regarding any OTC analgesic drug's efficacy, safety, benefits, or performance without competent and reliable scientific evidence to substantiate the claim. (Part II) Finally, the order contains a "safe harbor" for claims approved by the FDA under a tentative or final monograph, or pursuant to an approved new drug application. (Part III).

The ALJ concluded that the record did not support the imposition of a corrective advertising remedy. He noted that a belief study, relied upon by complaint counsel, showed that a superior efficacy belief lingered for six months after the last challenged ad was disseminated. Nevertheless, the ALJ compared the 51 years Warner Lambert ran deceptive Listerine ads to the eight-year Doan's campaign and concluded that there was insufficient evidence that consumer misbeliefs in Doan's superiority for the treatment of back pain would linger in the absence of the remedy. ID at 64. Finally, he rejected complaint counsel's claim that the need for corrective advertising could be inferred.

III. DECEPTION ANALYSIS

A. Legal Standard.

The first issue in this case is whether the challenged Doan's ads were deceptive. Section 5 of the Federal Trade Commission Act prohibits "unfair or deceptive acts or practices in or affecting commerce." 15 U.S.C. 45. Section 12 of the Act declares

dissemination of false advertisements regarding certain categories of products, including drugs, to constitute an unfair or deceptive act or practice under Section 5. 15 U.S.C. 52.

As the Commission explained in its policy statement on deception, appended to *Cliffdale Assocs., Inc.* 103 FTC 110, 176-184 (1984) (the "Deception Statement"), a representation is deceptive if it "is likely to mislead the consumer acting reasonably in the circumstances, to the consumer's detriment." *Id.* at 176. In practice, the Commission's deception analysis is applied as a three-part test asking whether (1) a claim was made; (2) the claim was likely to mislead a reasonable consumer; and (3) the claim was material. *E.g.*, *Cliffdale Assocs., Inc.* 103 FTC at 165. There is no requirement of intent. *Kraft, Inc.*, 114 FTC 40, 121 (1991) ("Evidence of intent to deceive is not required to find liability."), *aff'd*, 970 F.2d 311 (7th Cir. 1992), *cert. denied*, 507 U.S. 909 (1993).

The factors and evidence the Commission weighs in assessing the three prongs of the deception analysis are often interrelated. While Novartis' sole question on appeal is whether the ALJ "err[ed] in concluding that the alleged implied superior efficacy claim was material to consumers,"⁹ RAB 7, its claims arguably implicate the other two parts of the test. Therefore, to address fully Novartis' arguments on appeal, and to provide a context for our discussion of the materiality issue, we briefly discuss the first two elements before considering materiality.

B. The Challenged Ads Conveyed Superior Efficacy Claims.

We first consider whether the challenged ads communicated a superior efficacy claim for the treatment of back pain. In determining what claims may reasonably be ascribed to an ad, the Commission examines the entire ad and assesses the overall net impression it conveys. *Deception Statement*, 103 FTC at 176; *Kraft, Inc.*, 114 FTC at 122; *Thompson Med. Co.*, 104 FTC 648, 790 (1984), *aff'd* 791 F.2d 189 (D.C. Cir. 1986), *cert. denied*, 479 U.S. 1086 (1987).

⁹ In its appeal brief, Novartis states that while it "disputes the [ALJ's] finding that the challenged Doan's advertisements conveyed an implied superior efficacy claim to the requisite number of consumers under applicable precedent, it does not challenge that finding for purposes of this appeal." RAB 6. Novartis repeats that its appeal "challenges only the ALJ's conclusion that complaint counsel established the materiality of the alleged superiority claim," in its reply brief. RRAB 2. In a footnote, Novartis states that it is not conceding that the claim was communicated. *Id.* 2 n.1. By failing to appeal the issue, however, Novartis has conceded the issue for purposes of this litigation.

Claims can either be express or implied. Here we are dealing with an implied claim. Implied claims range on a continuum. At one end are claims that are "virtually synonymous with an express claim" and use "language that literally says one thing but strongly suggests another." *Thompson Med. Co.*, 104 FTC at 789. At the other end of the spectrum are claims that use "language that relatively few consumers would interpret as making a particular representation." *Id.*

The Commission's assessment of whether an implied claim is made necessarily begins with the advertisement itself. A facial analysis alone will suffice if it permits the Commission to conclude with confidence that the ad makes the implied claim. See *Stouffer Foods Corp.* 118 FTC 746, 798 (1994); *Kraft, Inc.*, 114 FTC at 121; *Thompson Med. Co.*, 104 FTC at 789. In cases where the claim is not manifest from an examination of the ad, the Commission will look to extrinsic evidence. *Id.* at 799; *Kraft Inc.*, 114 FTC at 121; *Thompson Med. Co.*, 104 FTC at 789. Such evidence might include, for example, the testimony of expert witnesses, market research studies regarding consumer reactions to the use of certain common terms, or consumer surveys. *Kraft, Inc.*, 114 FTC at 121-22. The Commission will carefully assess the quality and reliability of any extrinsic evidence introduced by the parties. *Stouffer*, 118 FTC at 799; Deception Statement, 103 FTC at 176. While methodological perfection is not required, with regard to reliance on copy tests and other consumer surveys, flaws in methodology may affect the weight the Commission gives to such results. *Id.*

1. A Facial Analysis of the Ads Reveals That
They Conveyed Superior Efficacy Claims.

Respondent ran the challenged ads over eight years.¹⁰ JX 2E ¶25. The "Graph" ad was the first in the new campaign. It begins with a visual of the profile of a person in front of what appears to be graph paper. CX 13. The individual twice attempts to bend over; the second time (after he has implicitly ingested Doan's), he is able to bend farther. The audio portion of the ad states that "Doctors measure back

¹⁰ Graph (CX 13) ran from May 1988 through June 1991; X-Ray (CX 14) ran from August 1989 through June 1991; Black & White (CX 15) ran from June 1991 through October 1992; Black & White Pan (CX 16) ran from December 1992 through June 1994; Ruin A Night's Sleep (CX 17) ran from January 1992 through August 1992; Ruin A Night's Sleep (CX 18) ran from August 1993 through June 1994; Activity Playtime (CX 20) ran from July 1994 through July 1995; Activity Pets (CX 22) ran from July 1994 through July 1995; and Muscles (CX 23) ran from August 1995 through June 1996. JX 2E ¶ 25.

pain by how far you can bend." The ad then depicts a package of Doan's on the left side of the screen while packages of three competing analgesic brands -- Advil, Tylenol and Bayer -- are displayed on the right. The audio portion concludes: "With an ingredient these pain relievers *don't* have." The spotlight on the other brands is then darkened leaving only a visual of the Doan's package on the screen.

The television ads respondent disseminated after "Graph" continued to emphasize that Doan's has an ingredient not found in competing analgesics while depicting competing products. The "X-Ray" ad introduces an audio and visual reference to Doan's as "the back specialist," and this tag line is also used in several subsequent Doan's ads. CX 14. Respondent began to use the terms "special" and "unique" to modify references to Doan's "ingredient" in "Black and White Back" and "Ruin a Night's Sleep" ads, respectively. CX 15; CX 17.

The superiority themes begun in "Graph" and "X-Ray" continued in subsequent ads such as "Activity Playtime" and "Activity Pets." CX 20; CX 22. As in earlier ads, both depict a package of Doan's alongside other analgesics while the voice-over states, "Doan's has an ingredient these pain relievers don't have." And once again, the ads conclude with the "back specialist" tag line. Respondent repeated similar themes in the challenged "Muscles" ad. CX 23.

The Free Standing Inserts -- color print advertisements included with newspapers -- closely tracked the claims in the television ads. One FSI that first ran in 1989 and again in 1990 and 1991, features a large Doan's package alongside smaller but clearly visible packages of Advil, Extra-Strength Tylenol, and Bayer. CX 32. Copy above the packages states: "Doan's. Made for back pain relief. With an Ingredient these other pain relievers don't have." *Id.* Other FSIs made similar claims and included depictions of competing brands. *See, e.g.,* CX 33-39.

Based upon a facial analysis of the challenged ads, we find that they clearly conveyed a claim that Doan's is superior to other analgesics, such as Bayer, Advil, Tylenol, Aleve and Motrin, for relieving back pain. The express claims that Doan's is made for back pain and contains a unique or special ingredient that the other featured brands do not have, coupled with the depiction of the other brands, combine to communicate that Doan's is superior to the

competing analgesics for back pain. This message is reinforced by the statement in some ads that Doan's is the "back specialist." The superior efficacy claim is implied, but on the continuum of implied claims, we find the claim so clear as to be nearly express.

2. Extrinsic Evidence Confirms That the Challenged Ads Conveyed Superior Efficacy Claims.

Substantial extrinsic evidence confirms our conclusion that the challenged ads make a superior efficacy claim. We affirm and adopt the ALJ's findings on this point (ID at 62-63), and highlight some of the more persuasive extrinsic evidence.

Several consumer surveys and copy tests show that consumers understood the ads to be making a superiority claim. For example, copy tests on mock-up versions of some of the challenged ads conducted by Bruno & Ridgeway, an independent consumer research company employed by Ciba, showed that approximately 30 to 45% of the consumers tested discerned a superiority message from the ads.¹¹ Likewise, a Mail Panel Communication Test conducted by Market Facts, a firm retained by Ciba to test the 1991 FSIs, revealed that between 47 to 59% of respondents strongly or somewhat agreed that the FSIs indicated that Doan's is better for back pain than other pain relievers. CX 238-z-71. In addition, complaint counsel commissioned U.S. Research ("USR") to conduct a mall intercept copy test to determine if the challenged ads communicated the superiority claim. Fifty-seven percent of the "Activity-Playtime" ad and 40% of the FSI respondents took the superior efficacy claim from the ads. IDF 179, 180; ID at 63.

¹¹ Bruno & Ridgeway used a mall intercept methodology where qualified respondents were shown mock-ups of the ads and then asked questions. CX 224-d; Peabody Tr. 160. A mall intercept study is conducted in suburban shopping malls in different cities. Interviewers posted in the mall solicit passers-by to participate. Interviewers first determine whether a participant meets the demographic requirements of the study. If so, the participant is shown materials and asked questions. Peabody Tr. 358. Mall intercept studies are sometimes criticized as less demographically balanced than mail panel or telephone surveys because mall-goers are not necessarily representative of society at large. See Peabody Tr. 204. Tests of this nature are referred to as forced-exposure communication tests.

Thirty-eight percent of the consumers tested indicated that the "Graph" ad communicated, as a primary or secondary message, that Doan's was "superior to other products." CX 224-m. In response to open-ended questions, 44% of the consumers who saw the "Black and White" ad gave answers that were coded as "superiority over other products." CX 236-j. If responses to all of the open-ended questions are netted, 62% indicated that at least one ad conveyed a superiority claim. CX 236-m. Similarly, the results for "Ruin A Night's Sleep" ad reported that 23% of Doan's users and 38% of Doan's non-users gave answers that were coded "superiority over other products." CX 244-h,v.

Ciba prepared these tests in the regular course of business, which indicates that at the time Ciba was running the ads, it was well aware that consumers understood them as conveying a superior efficacy message. Mr. Edward Peabody, the Director of Marketing Research, testified that he became concerned about miscommunication at the 10 to 15% level. Peabody Tr. 150-51. Nevertheless, as noted above, Ciba ran ads from which percentages of 30 to 45% drew a superiority message. While a respondent need not intend to make a claim in order to be held liable, evidence of intent to make a claim may support a finding that the claims were indeed made.

Novartis counters its own commissioned Bruno & Ridgeway test results with results obtained in ASI and ARS copy tests¹² that show low percentages of consumers drawing a superiority message from the ads.¹³ We find that the ARS and ASI test methods likely understate the communication results. These were tests of recall and persuasion administered either one or three days after exposure to the ad. The legal issue in the first prong of deception, however, is whether the claim was made and not whether it was memorable. Forced-exposure tests, like those conducted by Bruno & Ridgeway, where questions are asked when the ad is fresh in the consumer's mind, are more telling regarding whether a particular claim was made. The ARS and ASI tests also tend toward understatement because their questionnaires contain no close-ended questions, and the open-ended questions asked consumers about express claims in the tested ads rather than what the ad implied or suggested. Peabody Tr. 194-95.

In sum, the issue of whether the claim was made is not a close one. While technically an implied claim, respondent's superior efficacy message is plain from a facial analysis of the challenged ads

¹² ASI tests expose consumers to commercials during pilot shows on unused cable channels. The consumer watches one or two pilots with test commercials embedded for Doan's and other products. Twenty-four hours later, consumers are called and asked questions about the ads. Peabody Tr. 181-83. ARS testing is similar to ASI testing except it is done in a theater-like setting, often at a hotel. Three days after seeing the pilot, consumers are called and asked questions about the ads. Peabody Tr. 350-52.

¹³ Specifically, Novartis argues that a 1990 ASI copy test of "Black and White Back" reported that only 3% of the respondents questioned twenty-four hours after exposure to the ad reported that it communicated "product superiority," and that only 1% reported that it was "more effective/works better" in comparison to other products. Peabody Tr. 389; RX 98-h. Novartis also relies on ARS copy test data from 1991, 1993, 1994 and 1995 to show low percentages of consumer recall for a "more effective" or "good product/better/best" message within one to three days after exposure to the ads. RX 89-z-20; RX 32-y; RX 33-z-4; CX 265-z-2,3.

alone. The extrinsic evidence introduced on this issue provides additional support for our finding that the superiority claims for back pain treatment were made.

*C. The Challenged Ads Were Likely to
Mislead Reasonable Consumers.*

Having concluded that the claims were made, we proceed to consider whether those claims were likely to mislead reasonable consumers. Deception Statement, 103 FTC at 177. The applicable standard is whether a claim is *likely* to mislead; proof that particular consumers were actually deceived is not required. *Kraft, Inc.*, 114 FTC 133; *Cliffdale Assocs., Inc.*, 103 FTC at 165; Deception Statement, 103 FTC at 176. Further, "[t]he test is whether the consumer's interpretation or reaction is reasonable." *Id.* The interpretation need not be the only one to be reasonable. For example, a respondent can be held liable where multiple interpretations of a claim are possible, only one of which is deceptive. *Stouffer Foods Corp.*, 118 FTC at 799; *Kraft, Inc.*, 114 FTC at 120-21 n.8; *Thompson Med. Co.*, 104 FTC at 789 n.7. The reasonableness of an interpretation is not contingent upon its being shared by a majority of consumers. A claim would likely mislead a reasonable consumer if at least "a significant minority of consumers" would be deceived by it. Deception Statement, 103 FTC at 177 n.20. Importantly, the Deception Statement adds that an interpretation is presumed reasonable if it is one the respondents intended to convey. *Id.* at 178.

The misleading nature of the superior efficacy claims at issue here is plain. The claims are entirely unsubstantiated. Novartis concedes that no scientific studies demonstrate the therapeutic superiority of magnesium salicylate, the active ingredient in Doan's, over aspirin, acetaminophen, ibuprofen, or naproxen sodium for relief of back pain or any other indications contained in the Monograph issued by the FDA. JX 1D ¶ 9. As a general matter, the Commission considers claims regarding the efficacy of analgesics to be adequately substantiated when the claims are supported by the results of two well-controlled clinical studies. *Thompson Med. Co.*, 104 FTC at 825. Here, the claim that Doan's is superior to various other OTC analgesics for treating back pain is baseless and, consequently, likely to mislead reasonable consumers.

This conclusion is bolstered by the fact that Ciba intended to make the superiority claim. Ciba knew from its own copy testing data that consumers were taking a superiority message from the ads and that it had no substantiation for such a claim. Indeed, more than a significant minority -- 30 to 45% -- of consumers discerned this superiority message. Yet, Ciba continued to run the ads. This demonstrates that Ciba intended to, and in fact did, convey a superiority message. Therefore, consumers receiving such a message from the ads behaved reasonably in doing so. *See Thompson Med. Co.*, 104 FTC at 791.

Our finding of the reasonableness of the deceptive interpretation is further supported by the nature of the product. Analgesics are products the efficacy of which consumers cannot readily judge for themselves. Well-documented phenomena such as the "placebo effect" and the "usage effect"¹⁴ make it difficult for consumers to judge accurately the degree of an analgesic's efficacy. Superiority vis-a-vis other types of analgesics is even more difficult to ascertain absent well-controlled clinical trials. Thus, consumers necessarily rely upon manufacturers' representations and behave reasonably when they take those representations to be substantiated and accurate.

D. The Claims Are Material.

Finally, the Commission must determine whether the superior efficacy claim is material. A "material" misrepresentation is one that involves information important to consumers and that is therefore likely to affect the consumer's choice of, or conduct regarding, a product. *Deception Statement*, 103 FTC at 182. Materiality is closely related to injury in that when a consumer's choice is affected by a misrepresentation, the consumer, as well as competition generally, is injured. *Id.* at 182-83. However, proof of actual consumer injury is not required. *Kraft, Inc.*, 114 FTC at 134.

The ALJ concluded that the challenged claims were presumptively material, *ID* at 63-64, and found that the misleading

¹⁴ The "placebo effect" is the tendency of patients to respond favorably to a treatment regardless of the treatment's medical efficacy. *See Thompson Med. Co.* 104 FTC at 715 (Initial Decision.) The "usage effect" is the tendency of users of a product to rate it more highly than non-users of the product. *Mazis Tr.* 992, 1055-56. Users tend to use a product because they believe it works and thus tend to give it higher ratings than non-users. *Id.*; *Jacoby Tr.* 2987. This may be attributable, in part, to consumers' inability to evaluate effectively the efficacy of OTC analgesic products they use. *See American Home Prods. Corp.*, 98 FTC at 282 (Initial Decision).

claims were material based upon this presumption and the record evidence. IDF 227.

On appeal, Novartis argues that the ALJ misapplied the presumption, and improperly evaluated the evidence submitted by the parties. We conclude that the respondent's implied superior efficacy claim was material.

1. The Presumption of Materiality

a. Generally

Novartis and *amicus curiae* Grocery Manufacturers Association argue that the ALJ improperly elevated the presumption of materiality to a virtually irrebuttable conclusion of law. We disagree.

Certain categories of information are presumptively material, including, but not limited to, express claims, claims significantly involving health or safety, and claims pertaining to the central characteristic of the product. Deception Statement, 103 FTC at 182. Similarly, the Commission will infer materiality where the record shows that respondent intended to make an implied claim. *Id.* However, we "will always consider relevant and competent evidence to rebut presumptions of materiality." *Id.* at 182 n.47.

"To establish a 'presumption' is to say that a finding of the predicate fact," here, any of the factors listed above, "produces a required conclusion in the absence of explanation," here, materiality. *St. Mary's Honor Ctr. v. Hicks*, 509 U.S. 502, 506 (1993) (internal quotation marks omitted). In order to rebut the presumption, respondent must come forward with sufficient evidence to support a finding that the claim at issue is not material. Respondent can present evidence that tends to disprove the predicate fact from which the presumption springs (e.g., that the claim did *not* involve a health issue) or evidence directly contradicting the initial presumption of materiality. This is not a high hurdle. Unless the rebuttal evidence is so strong that the fact-finder could not reasonably find materiality, the fact finder next proceeds to weigh all of the evidence presented by the parties on the issue. *See id.* at 516 (noting that after the presumption drops out, "the inquiry . . . turns from the few generalized factors that establish [the presumption] to the specific proofs and rebuttals . . . the parties have introduced"). While the presumption itself is negated by sufficient rebuttal evidence, as previously noted, the predicate facts that gave rise to the presumption are not. These facts remain evidence

from which materiality can be inferred. *See Boise Cascade*, 113 FTC at 975 (1990). However, this evidence is simply part of the entire body of evidence considered. *See also* 21 *Charles Alan Wright and Kenneth W. Graham, Jr., Federal Practice and Procedure: Evidence* §§ 5122 *et seq.* (1977 and 1998 Supp.) (discussing the history and application of presumptions).

b. The Facts Underlying the Presumption

The ALJ applied a presumption of materiality because the challenged claim involves a health issue. He also concluded that the presumption was appropriate in light of evidence that the challenged superior efficacy claim relates to the central characteristic of the product, that is, Doan's ability to relieve back pain. *See, e.g., Sterling Drug*, 102 FTC at 753 (efficacy is "the most important feature of any analgesic"). Novartis admits that the presumption of materiality properly flows from these facts. RAB 46; RRAB 9.

We likewise conclude that these predicate facts -- that the claims go to health¹⁵ and to a central characteristic of the product -- both support an initial presumption of materiality and constitute strong evidence that the claims were material. Common sense and experience, along with the Commission's expertise in advertising matters, counsel that respondent's representation that Doan's is more effective than other analgesics in the treatment of back pain was important to consumers considering a purchase and likely affected their decisions as to which product to buy. This requires no great leap.

Along with the "health claim" and "central characteristic" bases for the presumption of materiality, the ALJ found that Ciba's intent to make a superior efficacy claim was evidence that the claim was material and supplied an independent basis for the presumption. ID at 64. Novartis objects to this finding.

An advertiser's intent to make a claim generally implies that the advertiser believes that the claim is important to consumers. *See American Home Prods.*, 98 FTC 136, 368 (1981) ("The very fact that AHP sought to distinguish its products from aspirin strongly implies that knowledge of the true ingredients of those products would be material to consumers."), *aff'd*, 695 F.2d 681 (3d Cir. 1982). Thus, the Deception Statement includes intent as a predicate fact giving rise

¹⁵ The record establishes that approximately 50% of adults in the United States suffer from back pain; thus, the treatment of that pain is an important health concern. CX 388-b.

to a presumption of materiality. 103 FTC at 182; *see also Thompson Med. Co.*, 104 FTC at 816. For express claims, the intent to make the representation is self-evident. In the context of implied claims, however, extrinsic evidence is required to establish an intent to make the claim.

Complaint counsel presents various documents showing that Ciba knew that the ads were conveying a superiority message. Novartis argues that the documents have been taken out of context and offers the testimony of employees who state that Ciba had no intent to make the claim. We find complaint counsel's evidence more credible and compelling and conclude that Ciba did indeed intend to communicate a superior efficacy message to consumers.

The record is replete with evidence demonstrating that Doan's ads were communicating a superiority claim and that Ciba management was aware of that communication. For example, the Bruno & Ridgeway communication study of the "Graph" ad categorized 38% of consumers exposed to the ad as answering that it communicated that Doan's was "superior to other products." CX 224-m. In a May 1988, memorandum to Ciba regarding the study, Bruno & Ridgeway recommended producing the ad, *inter alia*, because it "communicated *product superiority* and perceived efficacy." CX 225-d (emphasis added). This memorandum was directed to Ciba's Marketing Research Department and circulated to the Group Vice President of Marketing and other senior marketing executives at Ciba. In addition, the 1989 Doan's Marketing Plan prepared by Ciba reported the product superiority interpretation of the ad and described the "Graph" ad as a "strong execution which effectively communicates product superiority and perceived efficacy" CX 335-z-8.

Communication tests conducted for Ciba on its "Black & White Back," "Ruin A Night's Sleep," and "Activity Playtime" advertisements indicated that they communicated a product superiority claim as well. For example, the Bruno & Ridgeway copy test for "Black & White Back" reported that 46% of respondents recalled a message of superiority over other products. CX 236-j.

In May, 1994, Ciba's advertising agency, Jordan McGrath Case & Taylor, wrote to Ciba indicating that the networks were seeking substantiation for one of the implied superiority claims:

All three Networks are requiring substantiation for the claim "If nothing you take seems to help." The Networks believe that this language implies that Doan's

provides superior efficacy vis-a-vis the competitive products shown As such, to make this claim we will need substantiation that Doan's is more effective (due to its Magnesium Salicylate ingredient) at relieving back pain versus the competitors pictured.

Importantly, our Agency coun[sel] agrees with the networks.

IDF 111; CX 165-a. In response, Ciba deleted the words "you take" from the ad copy so that the ad stated "if nothing seems to help." CX 20.

Despite its knowledge that the ads were communicating an unsubstantiated efficacy claim, Ciba continued to disseminate some of the ads until May, 1996, just a month before the Commission's decision to issue a complaint in this matter and well after its investigation had begun.

Novartis argues that Ciba did not intend to make a superior efficacy claim, but rather to distinguish Doan's from other products. Novartis primarily relies on the testimony of former and current Ciba/Novartis managers who stated that Ciba did not intend to make any superiority claims. We are unpersuaded by these *post facto* denials. They ring hollow in the face of the contemporaneous documentary evidence revealing knowledge that a superiority claim was being communicated. *See, e.g., United States v. E. I. du Pont de Nemours & Co.*, 353 U.S. 506, 602 (1957).

In sum, we agree with the ALJ that Ciba intended to make the superiority claim and conclude that this intent, along with the predicate facts that the claim goes to health and to a central characteristic of the product, create a presumption, and provide strong evidence, of materiality.

2. Complaint Counsel's Additional Evidence of Materiality

Along with the evidence that gave rise to the initial presumption of materiality, discussed above, the record contains substantial additional evidence supporting a finding that the claim was material. This diverse body of evidence includes consumer survey results, expert testimony, and business records.

a. *The Nature of the Claims*

The record contains ample evidence showing that superior efficacy claims are important to consumers attempting to choose a back pain remedy. First, experts for both parties testified that a superior efficacy claim would be important to the back pain sufferer

when choosing an OTC analgesic. Mazis Tr. 1983 (testifying that superior efficacy is the primary reason why consumers choose one analgesic over another); Jacoby Tr. 3371 (testifying that superior efficacy claim would "motivate" back pain sufferers to purchase a product).

Second, the results of a study performed by Dr. Whitcup show the importance of efficacy claims. Dr. Whitcup asked consumers to rate the characteristics of pain relief products. Dr. Whitcup found that efficacy-related responses constituted three of the top four characteristics. RX 2-z-105. These results led Dr. Whitcup to conclude that analgesic products are generally chosen "on the basis of perceived efficacy," along with other factors. RX 2-z-3; Whitcup Tr. at 2815.

Third, several studies and copy tests Ciba commissioned in the ordinary course of business demonstrate the importance of efficacy claims to consumers of back-pain remedies. For example, a study delivered to Ciba management highlights a key finding: "[Doan's] is seen as particularly effective for back pain, and as having a special ingredient . . . this specificity is what users are looking for . . ." CX 256-c (Brand Equity Study, Exec. Summary). Similarly, Bruno & Ridgeway stated in its report on the copy test for the "Graph" ad that superiority "seems to be an important and persuasive idea." CX 224-1. Weiss Marketing Research Co. likewise concluded that the fact that the "Graph" ad created the impression that Doan's is better may persuade people to try Doan's. CX 227-z-3.

b. The Price Premium

Throughout the relevant period, Doan's was priced well above the general purpose analgesics depicted in the challenged ads, including Tylenol, Advil, and Bayer. In 1992, for example, a 24-count package of Doan's cost consumers 66% more than the same size package of Tylenol. IDF 15-16. The existence of this price premium constitutes further evidence of materiality. Deception Statement, 103 FTC at 183.

Respondent argues that these price premiums cannot be linked to the challenged claim because the premium is attributable to Doan's status as a niche brand. RAB 83. However, the challenged ads compared Doan's to general purpose, lower-priced analgesics and not to other similarly priced niche products. Thus, the ads used a misrepresentation in an effort to convince consumers to pay the additional amount for a product similar to general purpose analgesics.

3. Novartis' Evidence Against Materiality

Novartis offers several arguments to support its contention that the superior efficacy claim was not material. While we find that Novartis submitted a sufficient amount of relevant evidence to rebut the presumption of materiality, the totality of the evidence strongly compels a finding of materiality.

a. Effectiveness of the Ads

Novartis primarily argues that the ads were ineffective in communicating their message to consumers and therefore did not affect consumer purchase decisions (*i.e.*, they were not material). Respondent argues that Ciba ran ads that it knew were ineffective in order to appease retailers who demand manufacturer support for niche brands.¹⁶ RAB 56-57. Respondent cites market data for the relevant period that reflect little or no growth in sales or market share and reasons that the superior efficacy claim, therefore, did not affect consumer purchase behavior.¹⁷ RAB 71.

In the first place, this claim is irrelevant even if it were true. Materiality is not a test of the effectiveness of the communication in reaching large numbers of consumers. It is a test of the likely effect of the claim on the conduct of a consumer who *has* been reached and deceived. *See* Deception Statement at 182-83. The materiality inquiry builds upon the findings from the prior two factors in the deception analysis -- that the claim was made and that it was likely to mislead at least a significant minority of reasonable consumers exposed to the ad. Materiality turns upon whether those consumers who have drawn the claim from the advertisement and been misled by it are also likely to have their conduct affected by the misrepresentation.

In any event, respondent's argument that it ran an eight-year multimillion dollar campaign of ineffective ads is contradicted by the

¹⁶ Novartis also argues that the evidence shows that consumers did not find the challenged ads interesting or persuasive. RAB 57-59. Even if this were the case, in the context of the materiality inquiry, it is the challenged claim that is at issue and not the ad as a whole.

¹⁷ Along with its market *performance* arguments, Novartis advances a market *positioning* argument. Novartis contends that any superior efficacy belief that caused consumers to purchase the product was not the result of the misleading claim contained in the advertising, but rather was the result of product usage and Doan's historical market positioning as specifically for treating back pain. RAB 75-76. We reject this argument. The materiality inquiry focuses on the claim and its effect, not on other conceivable sources of consumer beliefs. Respondent's argument -- that if an advertiser is able to point to other possible sources for the misbelief engendered by its misrepresentation, it should be free to continue making its misrepresentation -- is untenable.

evidence. Market data demonstrate that the campaign produced positive results. Contrary to Novartis' assertions, Doan's maintained its market share in an extremely competitive environment and enjoyed an 80% increase in dollar sales during the relevant period.¹⁸ JX 2B ¶17. Because the number of consumers in the analgesics market in which Doan's competes is not growing appreciably (*i.e.*, the market is "mature"), a business must take customers from another brand in order to increase market share. *Stewart Tr.* 3467; CX 597. In such markets, maintenance of market share, and not increasing sales, is the primary criterion of success. *Id.* Indeed, Doan's ability to maintain its market share in the mature OTC analgesics market notwithstanding the fact that its advertising budget was much less than those of its competitors, JX 2E ¶24, reveals that the challenged advertising campaign was successful. The fallacy of Novartis' market performance arguments is also shown by Doan's survival and prosperity while other products were introduced and later withdrawn.

Even if Novartis' characterization of the market data were accurate, a history of static performance alone does not support its contention that the challenged ads were ineffective. Market performance is governed by a host of variables, and the materiality inquiry focuses upon a single claim.¹⁹ Absent evidence, lacking here, that links market performance directly to the claim or controls for other variables influencing market performance, general market data is not particularly useful in assessing materiality.

b. Puffery

Novartis argues that the challenged claims were not material because they amounted to mere "puffing." RAB 61-64. Respondent posits that if consumers did not take the superiority

¹⁸ Novartis argues that unit sales, and not dollar sales, is the more appropriate measure. Novartis contends that the strength of the dollar sales is misleading because it is attributable to the introduction of premium priced line extensions, namely Extra Strength Doan's and Doan's PM. These line extensions, however, were supported by the same advertising as regular Doan's and to the extent that the advertising was successful in convincing consumers to buy these premium-priced items, the profits made on these products suggest that the ads were having their desired effect.

¹⁹ For example, the existence and strength of competitors, the availability of substitute products, the maturity of the market, the state of domestic and foreign economies, general business cycles, distribution issues, and trends in consumer preferences, among other factors, can all affect market performance and do not relate to an unsubstantiated superior efficacy claim made in an advertising campaign.

claim seriously, the claim could not have misled them into buying the product. We reject this argument.²⁰

The claim that Doan's is more effective than other analgesic products for treating back pain is not a subjective opinion, a matter of personal taste, or a hyperbolic statement that might be deemed "puffery." Rather, it is an objective claim that can be scientifically tested. The implied claim at issue here not only asserts superiority, but specifies in what respect (back pain relief), why (its unique ingredient) and compared to whom (named competitors). CCAB 93-94. This is the opposite of puffery, and the exact type of claim that a consumer would reasonably expect to be substantiated by adequate clinical studies. *See Pfizer*, 81 FTC 23, 64 (1982) (puffing does not include "affirmative product claims for which either the Commission or the consumer would expect documentation").

Respondent also argues that approximately half of all consumers harbor a general belief that no analgesic is any more effective than any other in treating back pain. RAB 65-66. Presumably, respondent's point is that these skeptics would never be swayed by false efficacy claims. Even assuming, for the sake of argument, the accuracy of the statistic and the validity of the claim that a consumer's general belief could not be overcome by specific misrepresentations, the argument still fails. An advertiser does not have to fool all of the people to be found liable; a "significant minority" of consumers is sufficient. Deception Statement, 103 FTC at 177 n. 20. Nor does the existence of some hardened cynics free advertisers to make deceptive claims.

c. Consumer Surveys

Novartis offers various consumer survey results as support for its contention that the claim was not material. For the most part, the results touted by respondent, even assuming flawless methodology, are only marginally probative on the issue of materiality. With respect to the one survey that tested materiality, methodological flaws render its results unreliable.

Respondent first points to the ARS tests, which indicate a low consumer recall of superiority messages between one and three days

²⁰ In the first place, respondent's puffing argument goes to ad interpretation, an issue properly considered in connection with the second prong of the deception analysis, rather than to materiality. *See* Deception Statement, 103 FTC at 181 (puffing addressed as part of the discussion of the reasonable consumer's interpretation of the claim). As noted above, respondent has expressly waived any challenge to the second prong.

after seeing certain ads, as demonstrating that some of the challenged ads were not material. RAB 69-70. As discussed above, these tests asked only about express superiority claims, which were not made. Because the ARS tests did not even ask about implied claims (the only kind of claims at issue), they are hardly helpful. Moreover, materiality does not depend upon whether the claim is remembered by consumers days later. As discussed above, a claim does not have to be memorable to be material.

Novartis also claims that a study conducted by Dr. Jacob Jacoby in late 1996 shows that the superiority claim was not important to consumers and that the challenged ads were unlikely to cause consumers to purchase Doan's. RAB 76-79; RRAB 23-25. In Dr. Jacoby's study, consumers were shown one of six commercials²¹ and then questioned. Three of the questions (numbers 5a, 5b, and 5c) pertained to materiality. Question 5a asked: "Did seeing this commercial influence whether or not you would buy the advertised product in the future?" RX 5-z-112. Only those who responded affirmatively proceeded to question 5b: "Did it make you more likely to buy this product, or less likely to buy this product?" *Id.* Finally, those who responded "more likely," were asked 5c: "What is it about what the commercial said, showed or suggested that makes you more likely to buy it in the future?" RX 5-z-113. Dr. Jacoby contends that "only a trivial number" of those questioned indicated that the commercials made them more likely to buy the advertised product based upon a claim of superiority or because it had a special ingredient. RX 5-z-120.

Dr. Jacoby's test for materiality was flawed in several ways. First, by asking question 5c only of those who answered questions 5a and 5b in certain ways, Dr. Jacoby's study understated the number of respondents to whom the misrepresentation was material. Questions 5a and 5b ask about the *commercial* rather than the *claim*. Whether a commercial as a whole influences a consumer is not the same issue as whether a claim contained in the commercial is likely to do so. Despite the materiality of a given claim, the commercial containing that claim might fail to influence a consumer for any number of reasons. Because the claim need only be an important factor in the purchase decision, the results for questions 5a and 5b tell us little about the materiality of the superior efficacy claim.

²¹ Two of the six were challenged commercials, "Activity Playtime" and "Muscles." The remaining four were non-challenged controls. RX 5-z-101 n.1.

Moreover, once the pool of respondents had been inappropriately filtered through questions 5a and 5b, their number had been drastically reduced. Of the 142 people shown the challenged "Activity Playtime" ad, only 35 were asked question 5c. RX 6-z-39. Similarly, of the 129 people shown the challenged "Muscles" ad, only 36 were asked question 5c. RX 6-z-15. These numbers appear to be too small to be accorded significant evidentiary weight.

Dr. Jacoby's study also understated the number of respondents to whom the superiority claims were material by failing to ask directly whether the superiority claim was important to them. The open-ended nature of question 5c tended to yield a scattershot range of responses. *E.g.*, RX 6-z-40. For each of the two challenged ads, seven of the approximately 35 people asked question 5c (roughly 20%) gave responses that Dr. Jacoby interpreted as indicating materiality. RX 6-z-16; RX 6-z-40. These results are almost certainly understated because Dr. Jacoby failed to ask follow-up questions to determine *all* of the aspects of the commercial that made consumers more likely to buy Doan's in the future. As previously noted, in order to be material, a claim does not have to be the *only* factor or the *most* important factor likely to affect a consumer's purchase decision, it simply has to be *an* important factor. By seeking only one response to question 5c for each consumer tested, Dr. Jacoby ignored this fact and thereby undermined his results.

During the administrative trial, Dr. Jacoby sought to buttress his results by performing calculations cross-referencing several other questions included in the survey. While Dr. Jacoby did not explain his methodology in detail, he apparently matched the consumers he interpreted as drawing a superior efficacy claim from the ads (in response to questions 6a, 6b, and 8b)²² with those who stated, in answer to question 5b, that the commercial made them "more likely" to buy the product. *See* RX 209-a. *See* Jacoby Tr. 3061, 3338-343. Based upon these calculations, Dr. Jacoby concluded that for the challenged commercials, the overlap was only 12.7 and 4.7%, respectively. *See* RX 209-a. He reduced these results further by subtracting the percentages obtained from the control ads. *Id.*

²² Question 6a asked the main idea of the commercial, and 6b asked about the other ideas the commercial was trying to get across. RX 5-z-96. Question 8a asked whether the commercial said, showed, or suggested that the advertised brand was more effective than other brands, and question 8b asked what the commercial said, showed or suggested that conveyed a superior efficacy claim. *Id.*; RX 5-z-139; RX 5-z-141. The results from these questions reveal a substantial communication rate for the challenged ads -- depending on the question, in the 30 to 50% range. RX 5-z-120-129; 139-148.

This procedure did not salvage Dr. Jacoby's study. The results of Dr. Jacoby's cross-referencing exercise derive from the results obtained from question 5b. That question only tells us which consumers found the commercial persuasive and does not reveal anything about what aspects of the commercial made it persuasive. As explained above, a claim by itself can be material and yet, when viewed in the context of a commercial, fail to persuade a consumer to buy the product. Therefore, question 5b improperly excluded many relevant respondents. As it is, Dr. Jacoby's results show that of the 35 consumers who indicated that they found "Activity Playtime" persuasive, 20 (57%) also drew a superior efficacy claim from the ad. *See* RX 209-a. While one might logically infer that the superior efficacy claim played an important role in making the ad persuasive to many of these consumers, the flaws in Dr. Jacoby's methodology preclude a definitive and quantified linkage.

Finally, Dr. Jacoby conceded that if a person suffers from back pain and is offered a product that is superior for the relief of back pain compared to other analgesics products, then that person would be motivated to purchase the product. Jacoby Tr. 3371. Thus, even Dr. Jacoby agrees that a superior efficacy claim is likely to affect consumers' purchase decisions.

E. Conclusion

Thus, although we have concluded that the evidence adduced by Novartis requires us to look beyond a simple presumption of materiality, our review of that evidence shows that it ultimately adds little to respondent's side of the scales. Weighing *all* of the available evidence -- including the basic and irrefutable fact that the misleading claims of superiority relate to the central characteristic of the product and involve health; the evidence that the claims were intended to affect consumer decisions; and the range of other evidence adduced by both sides -- we have no hesitation in concluding that the claims were material. The extensive record amassed in this proceeding strongly confirms the common-sense proposition that efficacy is a pivotal consideration for consumers in selecting an analgesic, and that claims of superior efficacy are highly material to those consumer choices.

IV. CORRECTIVE ADVERTISING

A. Legal Framework For Imposing Corrective Advertising

Corrective advertising is an appropriate remedy if (1) the challenged ads have substantially created or reinforced a misbelief; and (2) the misbelief is likely to linger into the future. See *Warner-Lambert Co. v. F.T.C.*, 562 F.2d 749 (D.C. Cir. 1977), *cert. denied*, 435 U.S. 950 (1978). In such cases, the lingering effects of a deceptive advertisement constitute a "clear and continuing injury to competition and to the consuming public" and justify the requirement of a corrective message. *Warner-Lambert Co.*, 86 FTC 1387 (1975).

It is well settled that, in analyzing each of these two prongs, we may consider indirect evidence as well as direct evidence. See, e.g., *National Comm'n on Egg Nutrition v. FTC*, 570 F.2d 157 (7th Cir. 1977), *cert. denied*, 439 U.S. 821 (1978); *Warner-Lambert Co.*, 562 F.2d at 762; *American Home Prods.*, 98 FTC at 407; Statement in Regard to Corrective Advertising, Trade Reg. Rep. (CCH) ¶ 39,046 (1979) (stating "that the absence of consumer research will not preclude a corrective advertising order if other factors in the evidentiary record indicate that the challenged advertising campaign has created or reinforced consumer beliefs"). Therefore, we reject Novartis' argument that reliance on inferences would be a departure from a "settled understanding" expressed in the corrective advertising case law. RRAB 53.

We also reject the ALJ's holding that corrective advertising is inappropriate absent "certainty" that the misbeliefs will otherwise linger. The proper standard is whether, by a preponderance of the evidence, the misbelief is *likely* to linger. A requirement of certainty that a misbelief will linger would be impossible to satisfy, because certainty about the future is unattainable.²³ The ALJ's finding that the false beliefs are not *certain* to linger applies the wrong legal standard.

Finally, we reject respondent's argument that corrective advertising can only be ordered if it is shown that such a remedy is the *only* way to eliminate consumer misperceptions. RRAB 94 (citing *American Home Prods.*, 98 FTC at 411). Contrary to the ALJ's suggestion, corrective advertising is not a drastic remedy. ID at 65.

²³ *Warner-Lambert* was a remarkable case. "Comparable proof of deception-perception-memory influence would be virtually impossible in most advertising cases corrective advertising must apply to more than the one-in-a-million type of ad campaign present in *Warner-Lambert*." R. Pitofsky, *Beyond Nader: Consumer Protection Regulation of Advertising*, 90 Harv. L. Rev. 661, 698 (1977) (footnote omitted).

Requiring the dissemination of a truthful message to counteract beliefs created or reinforced by a respondent's deceptive message is an appropriate method of restoring the *status quo ante* and denying a respondent the ability to continue to profit from its deception.

B. Methodology of Belief Studies

To support a corrective advertising remedy, complaint counsel relies on three consumer belief studies to demonstrate (1) that the challenged advertising campaign created or reinforced misbeliefs harbored by consumers about Doan's, and (2) that those misbeliefs are likely to linger. Complaint counsel claims: first, that the A&U Study demonstrated that Doan's had a weak image compared to the other leading brands of general purpose analgesics in 1987, before the challenged ads were aired; second, that a Brand Equity Study, conducted mid-way through the campaign in 1993, showed that Doan's was then viewed as particularly effective for back pain and as having a special ingredient -- two claims that were the focus of the new campaign; and third, that a 1996 NFO study, commissioned by complaint counsel for this litigation, showed that users of Doan's and non-users who were aware of Doan's continued to harbor misbeliefs about the superiority of Doan's for back pain six months after the campaign had ended and that the misbeliefs were disproportionately high compared to the beliefs held for other products. One of complaint counsel's experts, Dr. Michael Mazis, also compared the results of these three studies, concluding that Doan's ads created or reinforced a superiority belief.

To counter complaint counsel, Novartis relies on three separate belief studies conducted for this litigation by Mr. Robert Lavidge, Dr. Morris Whitcup, and Dr. Jacob Jacoby. Novartis contends that these studies show that consumers do not have misbeliefs about Doan's. In addition, Novartis contends that the ARS and ASI copy tests and an Aleve Tracking Study, conducted by Ciba when Aleve was introduced into the OTC analgesic market, demonstrate low levels of unaided recall for the Doan's products. Novartis argues that if consumers are unaware of Doan's, they cannot harbor misbeliefs of any kind, and, thus, corrective advertising would be an inappropriate remedy.

The methodology and results of each of these studies are described in Appendix I.²⁴ The Brand Equity, Jacoby, and Lavidge studies used a mall intercept method. The A&U, Aleve Tracking, and Whitcup studies were conducted by telephone. Dr. Whitcup testified that telephone surveys are the most appropriate way of assessing consumer attitudes because their samples are most representative of the total population.²⁵ Whitcup Tr. 2107. Finally, the NFO study used a mail panel method. Mail panel research involves mailing research instruments to individuals who previously have agreed to serve as survey participants. These individuals complete and return the research instrument. The mail panels used by NFO were designed to achieve demographic balance.²⁶ Clarke Tr. 11. NFO panels are especially useful in identifying hard-to-reach consumers because of the large sample size. *Id.*

We initially discuss two criteria that affect the evidentiary value of the parties' consumer belief studies. First, consumer beliefs should be measured without exposing survey participants to the challenged ads. This is because such exposure may elicit the participant's interpretation of the ad rather than his or her beliefs. Second, the universe of participants surveyed should be properly selected to eliminate usage bias and to compare relevant groups. In testing for credence claims about a product, where consumers may have difficulty objectively evaluating the product's performance, the survey should insert controls to counter bias stemming from the use of the product.

1. Exposure to Advertising

All of the studies but one asked participants questions about their beliefs without exposing them to ads. Only the Lavidge study showed consumers television ads for four OTC products prior to questioning. Both complaint counsel's expert, Dr. Mazis, and respondent's expert, Dr. Jacoby, testified that the appropriate way to measure beliefs is

²⁴ As the Commission stated in *Stouffer* "[p]erfection is not the prevailing standard for determining whether a copy test may be given any weight. The appropriate standard is whether the evidence is reliable and probative." 118 FTC at 807. While a given study may be flawed in some respects, it still can be probative, and any deficiencies simply will affect the weight given to the evidence. *Id.*

²⁵ Random digit dialing reaches both listed and unlisted numbers. Whitcup Tr. 2108.

²⁶ Mail panel participants may under-represent those with the lowest incomes (who may not have a permanent address or may be illiterate) and those with the highest incomes (who disproportionately decline to participate). Clarke Tr. 13.

without exposure to ads. Mazis Tr. 1276; Jacoby Tr. 2962, 2968, 3155. By exposing consumers to advertising before asking questions about their beliefs, it is difficult to determine whether the consumers' responses to questions designed to elicit their beliefs reflect their interpretation of the ad or, in fact, their beliefs. We find that the Lavidge study is not probative of consumer beliefs because, contrary to the first criterion, participants were exposed to advertising as part of the study.²⁷ By contrast, the A&U, Brand Equity, NFO, and Whitcup, studies as well as the relevant portions of the Jacoby study were conducted in keeping with this criterion.

2. The Proper Universe

The appropriate universe is crucial to determine the probative value of any consumer survey. An improper universe can render a survey useless. Experts for both parties agreed that in a survey of consumers' beliefs regarding Doan's superior efficacy, the universe should be limited to those who suffer from and treat back pain. Mazis Tr. 1120; Lavidge Tr. 770; Whitcup Tr. 2109. All of the belief studies, with the exception of the Aleve Tracking Study, limited the universe of participants to those who suffered from back pain and had used an OTC analgesic product within the previous year. Because the Aleve Tracking Study was not confined to backache sufferers, the results are not particularly useful.²⁸

The experts part company on the question of whether the survey respondents should be aware of the product for which the beliefs are tested. Complaint counsel's expert, Dr. Mazis, concluded that the appropriate universe for testing consumer beliefs about Doan's would include both people who were users of Doan's and people who were aware of, but not users of, Doan's (aware non-users). With such a universe it would be possible to compare the beliefs of users of

²⁷ There are other flaws in the Lavidge study which may tend to understate the frequency of superior efficacy beliefs regarding Doan's. Dr. Mazis testified that it was difficult for consumers to answer the questions used in that study, because it required participants to sort through all the brands of which they were aware and then to make judgments about them. Mazis Tr. 1274-76. Moreover, Mr. Lavidge failed to control for usage bias; therefore, the fact that fewer of his participants used Doan's than used other products understated the superiority beliefs regarding Doan's. Mazis Tr. 1271. Mr. Lavidge even acknowledged that personal experience with a product is very important in shaping a consumer's beliefs about the product. Lavidge Tr. 750. The ALJ rejected the Lavidge study. IDF 310.

²⁸ Admittedly, the purpose of the Aleve Tracking Study was to track the introduction of Aleve on the OTC market generally, although it did develop some information about Doan's. Dr. Mazis testified that the respondents in the Aleve Tracking Study were not focusing on back pain, so a back pain-specific product would be much less likely to be recalled. Mazis Tr. 2016.

Doan's to users of other products. In order to control for usage bias, it is also necessary to compare the beliefs of people who were aware of the product, but not users, with the beliefs of users of the product. Mazis Tr. 1122-23. On the other hand, Novartis' experts contend that a survey limited to participants who are aware of Doan's would not be representative of the relevant population, and would tend to overstate ratings for Doan's relative to other OTC analgesics. Whitcup Tr. 2182. In their belief studies, Novartis' experts included consumers who were unaware of Doan's. Dr. Jacoby testified that this was an important group of consumers because they were prospective consumers and they were the people to whom the advertising is directed. Jacoby Tr. 2937.

On balance, we conclude that the most reliable studies are those that focus on persons who have used Doan's or are aware of the product. Because our inquiry is whether the Doan's ad campaign has created or reinforced misimpressions about the product's efficacy, it makes sense to direct our attention to those consumers who, in fact, have an opinion about Doan's -- which will necessarily be those who are aware of the product.²⁹

The soundness of this approach is confirmed by consideration of the problem of user bias. Users of a product tend to rate it more highly than do non-users. Mazis Tr. 992.³⁰ This preference may be attributable, in part, to consumers' inability accurately to evaluate the efficacy of certain products -- such as analgesics -- relative to alternatives. *See American Home Prods. Corp.*, 98 FTC at 282 (Initial Decision). Although the Whitcup and Jacoby consumer studies included consumers who were Doan's users (8% in Whitcup universe and 21% in Jacoby) the studies failed to ascertain the number of remaining consumers who were aware of Doan's, making it impossible to compare the beliefs of consumers who use the product to those who are aware of the product, but are not users. Accordingly, the most reliable assessments of consumer beliefs will be based on comparisons of like groups -- *e.g.*, users of one brand to users of another brand; or aware non-users of one brand to aware non-users of another. Only the NFO belief study used such a methodology. The

²⁹ Indeed, when Ciba itself tested consumer beliefs in the regular course of business, it limited its samples to those who were aware of the product. The A&U Study and the Brand Equity Study were confined to consumers who were aware of Doan's.

³⁰ *See infra* n.13.

NFO demonstrated that 77% of Doan's users and 45% of aware non-users believed that Doan's is superior to other brands.³¹

*C. The Evidence Supports the Imposition
of Corrective Advertising.*

Having found that the superior efficacy claim was deceptive, and that a relevant universe of consumers believe that Doan's is superior, we must determine whether (1) the ads created or reinforced that misbelief; and, if so, whether (2) that misbelief is likely to linger. We address each of these issues in turn.

1. The Challenged Ads Created or Reinforced Misbeliefs.

A number of factors influence consumer beliefs about and attitudes toward a product, including advertising, use of the product, recommendations by doctors or others, and packaging. Mazis Tr. 1606-09; Lavidge Tr. 750-52. As a general matter, advertising and usage are among the most important of these factors.³² *American Home Prods.*, 98 FTC at 281. But product usage can be a primary source of a consumer's product image "only if the consumer has the ability to discriminate objectively between various similar products. . . . Thus, if a consumer is unable to evaluate objectively a product's actual efficacy, the role of advertising as a cause of the consumer image is enhanced." 98 FTC at 410. Because consumers cannot objectively evaluate OTC analgesics, including Doan's, advertising is an important factor in creating and reinforcing beliefs about such products. Mazis Tr. 1609. The Doan's eight-year advertising campaign created and/or reinforced beliefs and made them more salient, understandable, and resistant to change. Mazis Tr. 1205-06. Indeed, such a long campaign could do both, having initially created and later reinforced beliefs.

After the 1987 A&U study showed that Doan's had a weak image, CX 221-c,d, Ciba launched the challenged advertising campaign, claiming that Doan's was superior to other general purpose analgesics for back pain and that Doan's contained a special ingredient for that

³¹ The Jacoby study, as far as it goes, actually corroborates the results of the NFO study. For example, in the Jacoby study, 38% of Doan's users reported Doan's as "more effective" in contrast to 23% of Advil and 17% of Tylenol users who reported their brands as "more effective." RX 5-z-105.

³² Indeed, word-of-mouth recommendations largely depend upon prior exposure to advertising and product usage. *American Home Prods.*, 98 FTC at 281.

purpose. Consumer survey data, conducted before final production of the ads, showed that consumers were drawing a superiority claim for back pain from the advertising. *See* ID at 62-63. The challenged superiority claims were consistent and made throughout the campaign. In fact, the eight-year campaign presented a focused message of comparative superiority.

The Brand Equity Study, conducted midway through the campaign, provides strong evidence that the advertising had already influenced consumer beliefs. Dr. Mazis' summary of that study shows that users of Doan's put Doan's in the top category for back pain efficacy twice as often as users of Tylenol, Advil and Motrin gave such a rating to the products they used. CX 480-a. Non-users who were aware of the product also rated Doan's more highly than the other brands (though less dramatically so). CX 480-c. Thus, in five years, the Doan's brand developed from having a weak image to being viewed by users and those aware of the brand as particularly effective for back pain.³³

Moreover, changes in consumer beliefs during that five-year period closely tracked the claims made in the challenged advertising. Mazis Tr. 1057. Dr. Mazis' summary sets out the percentage of users and non-users who were aware of Doan's who believed two attributes claimed in the challenged ads (superiority for back pain and use of a special ingredient) and a third that was not advertised (superiority for all kinds of pain). CX 480-c. Consumers tended to perceive Doan's as particularly effective for back pain and also as containing a unique ingredient.³⁴ Mazis Tr. 1058. The non-advertised attribute (effectiveness for all kinds of pain), however, was not believed by many consumers. CX 480. Accordingly, the Brand Equity Study supports the conclusion that the challenged ads played a substantial role in creating or reinforcing consumer misbeliefs about Doan's.

The results of the NFO belief study similarly show that in 1996, a disproportionately high percentage of Doan's users and aware non-users believed that Doan's was more effective than other OTC pain

³³ Respondent argues, and the ALJ found, that the attribute of "being particularly effective for back pain" does not necessarily imply that a product is "more effective than other OTC pain relievers for back pain relief," and thus that the Brand Equity Study is not probative of superiority beliefs. IDF 246. We disagree. A product that is no more effective than any other would not be "particularly" effective. The word "particularly" is inherently comparative. *See, e.g., Webster's New International Dictionary* 1783 (2d ed. 1938) (defining "particularly" as "[e]specially; unusually").

³⁴ Dr. Mazis testified that consumers would not infer that a product had a special ingredient for back pain simply from the fact it is only advertised and marketed for back pain. Mazis Tr. 1621.

relievers for back pain relief. CX 482. Dr. Mazis testified that the Doan's advertising played a significant role in creating or reinforcing the superiority belief. Mazis Tr. 1216-18.

Dr. Mazis also compared the results of the 1987 A&U Study with the 1996 NFO study. He testified that this analysis shows that "superior efficacy" beliefs for Doan's relative to Advil, Bayer, and Tylenol increased (between 0.5 and 1.25 scale points on a seven-point scale) between 1987 and 1996 relative to other brands, as did beliefs that Doan's has a "special ingredient" (between 0.75 and 1.875 points). At the same time, consumer beliefs that Doan's "is safe to use" -- a claim not made in its advertising campaign -- declined in rough proportion to the other products. CX 532-e, h, k; Mazis Tr. 1244-45. Dr. Mazis concluded that this striking pattern, in which changes in consumer beliefs mirrored advertising themes (or their absence), confirms that the ads created or reinforced the misbeliefs. Mazis Tr. 1246. The ALJ rejected Dr. Mazis' comparison of the studies because of the differences in their methodologies and questions asked. IDF 350. While we acknowledge the methodological differences between the studies, we believe that these data nonetheless corroborate the connection between the ads and the misbeliefs.³⁵ See IDF 351, 352.

We reject respondent's contention that the Aleve Tracking Study and the Whitcup Study demonstrate a low unaided recall of Doan's advertising, so consumers cannot harbor misbeliefs about Doan's. RRAB 61, 62. We have already noted that because the Aleve Tracking Study was not confined to back pain-sufferers, its results are not useful. It tends to understate those consumers who may have beliefs about Doan's and did not ask back pain-specific questions. And the results of the Whitcup study are undermined by the small number of Doan's users sampled (35) in contrast to the number of Tylenol users (190) and Advil users (121). RX 2-z-49. Indeed, Dr.

³⁵ Contemporaneous documents further indicate that Ciba's ad agency, Jordan McGrath, recognized that the challenged advertising was affecting superiority beliefs about Doan's among consumers. One such document from 1994 stated that:

[t]he 1993 Brand Equity study showed that the specificity of Doan's positioning, as communicated by "The Back Specialist" campaign line has helped differentiate the Brand from other pain relievers. Clearly this unique positioning has contributed to this.

CX 387-y. (Doan's FY'95 Marketing Plan Key Issues, July 25, 1994.)

Similarly, Jordan McGrath's Vice President Account Supervisor who worked on the Doan's account noted the effectiveness of the challenged claims: "'The Back Specialist' we have kind of engraved that in the consumer's mind." CX 503 at 97 [Jackson Dep]. Other Ciba documents indicate the significant role that advertising played in driving Doan's sales. CX 404-a-b; CX 499-a.

Whitcup himself appended the letter "c" (designating "caution" due to a small base) to data regarding Doan's user responses.

As in its attack on materiality, respondent argues that the Whitcup, Lavidge, and Jacoby studies show that a majority of consumers do not believe that any OTC analgesic brand was more effective than others for relieving back pain, RRAB 63, 64, presumably rendering advertising ineffectual in creating or reinforcing any superior efficacy beliefs. Even if those studies show that a *majority* of consumers so believe, a *substantial number* of respondents remain who believe that one brand may be more effective than others. See RX 23-j; RX 2-t; RX 6-j. The results do not shed light on whether the challenged ads created or reinforced misbeliefs in the minds of these remaining consumers.

Novartis also recycles its argument that, even if consumers harbor misimpressions about Doan's, such beliefs are due to Doan's ninety-year positioning as a back-specific analgesic and not to the challenged ads. RRAB 75-77. In fact, however, there is no record evidence to support respondent's speculation. To the contrary, the A&U Study showed that Doan's historical positioning did not have a major impact on consumer beliefs, and that the product's image remained weak prior to the commencement of the ad campaign at issue here. CX 221-c. As the evidence discussed above shows, the ensuing multi-million dollar, eight-year campaign was successful in enhancing the product's image by persuading consumers, incorrectly, of Doan's superior efficacy. In any event, even if that misimpression existed to some degree prior to the ad campaign, the campaign at the very least had the effect of *reinforcing* such beliefs, which to supports a corrective advertising remedy. See *Warner-Lambert Co.*, 562 F.2d at 762. In fact, the campaign could have both created and reinforced misbeliefs in that beliefs may have been created and later reinforced.

We likewise reject respondent's argument that complaint counsel failed to establish a link between consumer beliefs and the challenged advertising. Respondent claims that the NFO study is flawed because Dr. Mazis did not ask survey participants whether they were aware of Doan's advertising. RRAB 79.³⁶ While a specific question asking whether participants recalled the challenged advertising might have

³⁶ Dr. Mazis testified that he did not ask whether people had seen advertising for Doan's because at the time of the NFO study, the ads had not run for six or seven months, and people might not reliably recall ads that they did, in fact, see. Mazis Tr. 1797. He also testified that beliefs from ads may linger even though recall of specific ad claims may not. Mazis Tr. 1798, 1800.

been useful, we find that the failure to include such a question was not a fatal flaw. The evidence of parallel changes in consumers' beliefs about Doan's that track the course of the eight-year campaign sufficiently establishes the link between the challenged ads and the resultant misbeliefs.

Respondent further claims that the ads did not create or reinforce misbeliefs because the campaign was ineffective in communicating its superiority message (again repeating a claim employed to attack materiality). Novartis argues that Doan's used a small advertising budget and relied on "worn out" ads. *See e.g.*, RAB 16, 23; RRAB 1. Such a campaign, it claims, would be incapable of creating misbeliefs in the minds of consumers that would justify corrective advertising. This line of argument, however, is not only inconsistent with the evidence already discussed regarding the campaign's actual effects but is also belied by Ciba's actions during the campaign, which evince its reliance on the campaign.

Ciba continually refined its marketing plans in response to changing demographic information. Ciba conducted research to define precisely the target audience of backache sufferers and revised its media plans accordingly. For example, after learning that its target audience was disproportionately female and Southern, the yearly marketing plans considered these factors in developing media strategies and ad placement. CX 335-z-14; CX 343-z-64. Ciba's decision to test Spanish radio ads in Houston during short periods in 1991 and 1993 is another example of Ciba's responsiveness to changing demographics. Similarly, when competitors entered the market, Doan's responded through defensive advertising. When Nuprin Backache was introduced in the first half of 1993, Ciba increased Doan's television advertising budget by approximately \$500,000. CX 357-b. When Bayer Select Backache was introduced, Ciba increased its spending to run more advertising during the new product's introductory period. CX 378-k. A Marketing Director wrote that Doan's used "a consistent strong advertising campaign to defend and even build share in the face of these new competitors." CX 399-b.

Finally, Novartis' resort to market share data and statistics wholly fails to show that the ads could not have created or reinforced consumer misbeliefs. Respondent claims that Doan's unit sales actually declined during the relevant period; that even when measured against OTC analgesics used to treat backache, Doan's market share stood at 5%; that Doan's was unable to increase its sales and market

share even after dropping its price,³⁷ and that any increases in factory or consumer dollar sales resulted from the introduction of the Extra Strength and PM lines. RAB 17-19. In fact, the sales volume fluctuated during these years rather than declining and Novartis' expert, Dr. Scheffman, relied upon incomplete data that did not extend beyond 1993. RX 189-a. Volume sales increased by 10% in 1995. CX 402-c; CX 408-h. Further, Doan's share of the total analgesic category grew from 0.8 to 0.9% between 1993 and August 1995, a 12.5% increase, and there was nearly an 80% increase in factory sales. JX 2B ¶17. Moreover, in a mature market, a key criterion for advertising success is maintenance of market share. Stewart Tr. 3467. And, a variety of marketing plans during the relevant period indicate that sales were responding well to ads. CX 360-z-43; CX 393-q; CX 408-i. Accordingly, we conclude that the challenged ad campaign was successful, and that the challenged ads created or reinforced misbeliefs among consumers regarding the superior efficacy of Doan's.

2. The Effects of the Challenged Ads Are Likely to Linger.

We next turn to the question whether the misimpressions caused or reinforced by the challenged advertisements are likely to linger in the absence of corrective advertising.

The NFO study, conducted six months after the ads ceased, demonstrates that 77% of Doan's users and 45% of those who were aware of but did not use Doan's believed that the product was superior to other brands for the treatment of back pain. These percentages are disproportionately high for both groups relative to other brands.³⁸ Thus, the NFO study shows that, for at least six

³⁷ Respondent also argues that the low share of usage, conversion rates, and advertising penetration data demonstrate that consumers do not believe that Doan's is more effective than other analgesics for the relief of back pain. RRAB 59-60. At best, these factors serve as an inexact proxy for consumer beliefs. The direct evidence shows that consumers believed that Doan's was superior to other OTC analgesic products.

³⁸ Respondent's arguments that the NFO study is flawed, RRAB 67-71, are without merit. As noted above, the NFO study used an appropriately restricted universe, and its protocol was proper and provided reliable results. Respondent argues that the absence of follow-up validation procedures renders the data unreliable. But all experts agreed that the purpose of validation is to deter and detect interviewer misconduct, Mazis Tr. 1128; Lavidge Tr. 788; Jacoby Tr. 2950-51. We therefore find that this mail panel study (which did not utilize an interviewer) did not require validation. Respondent's concern that the wrong household members may have completed the survey questionnaires, thereby rendering the results unreliable, is unwarranted. The study employed mechanisms to account for this possibility, Clark Tr. 40-41, and eliminated questionable responses.

months after the challenged ads stopped being aired, their effect continued to linger.

A Novartis expert, Dr. James Jaccard, re-analyzed the NFO data, attempting to measure the magnitude of the differences in brand attribute ratings, RX 132 f-o, and to demonstrate that there likely are not meaningful differences in brand efficacy beliefs held by those who use or are aware of Doan's and those who use or are aware of other OTC analgesics. Jaccard Tr. 1427. In fact, Dr. Jaccard's testimony does not undermine the conclusions of Dr. Mazis and the NFO study.

First, Dr. Jaccard has no expertise regarding the OTC analgesic market and does not know whether any of the differences in effectiveness beliefs in the NFO study were significant. Jaccard Tr. 1523. Second, he conceded that traditional null hypothesis testing, as used by Dr. Mazis, is the dominant analytic technique, Jaccard Tr. 1510, and that his own approach is not common. Jaccard Tr. 1444-45. Third, Dr. Jaccard acknowledged that the differences observed in the NFO study might be practically significant. Jaccard Tr. 1450-51.

A number of factors that support the results of the NFO study also support an inference that consumers' false beliefs are likely to endure. *See American Home Prods.*, 98 FTC at 411. Specifically, the challenged claims were (1) very salient to consumers (because superior efficacy is among the primary considerations for a consumer in selecting a back pain remedy), (2) clearly and consistently conveyed by the challenged ads, and (3) an integral part of an eight-year campaign. Respondent spent approximately \$65,000,000 disseminating these claims, primarily in fifteen-second ads whose primary message was the false superiority claim. The ads reached between 80 and 90% of Doan's target audience approximately 20 to 27 times each year. JX 2F ¶ 28. A likelihood of lingering effects can also be inferred from copy tests, which demonstrated that consumers drew a superiority claim from the Doan's ads after just one or two exposures.³⁹ *See Warner Lambert*, 86 FTC at 1470.

Finally, Novartis questions the significance of the NFO study results. Dr. Mazis analyzed the different sets of ratings for joint users of Doan's and one of the other five brands and found that, on average, 25% more people rated Doan's as superior for back pain relief. IDF 263. The comparative analysis for non-users who were aware of several products revealed that, on average, 20% more people rated Doan's superior. IDF 265. This demonstrates a strong difference in beliefs among these groups. Mazis Tr. 1196-1199.

³⁹ Dr. Mazis testified that the beliefs are likely to linger in light of the length and effectiveness of the ads, the fact that they stressed the superiority claim repeatedly, and the recall evidence from the copy tests. Mazis Tr. 1255-56.

Novartis' expert, Dr. Scheffman, testified that any misimpression created by the Doan's ads is not likely to linger due to Doan's insignificant advertising spending and the placement, length, and frequency of the challenged advertising compared to the amount of advertising in the OTC analgesic marketplace. Scheffman Tr. 2612-13. We reject the argument that market share, total sales, or the relative size of the advertising budget determine whether a misbelief is likely to linger. All of these factors go primarily to the purported *magnitude* of the harm created by the deceptive ads and not to the likelihood that the misbelief will linger.⁴⁰ Moreover, niche marketers who engage in deceptive campaigns should not be immune from a corrective advertising requirement simply because of the relative size of their advertising budget or market shares.

Respondent also contrasts the evidence of lingering misbeliefs in *Warner-Lambert*, in which we ordered corrective advertising, to that in cases where we declined to order corrective advertising. RRAB 96. Novartis argues that we have rejected corrective advertising in three cases where challenged ads were disseminated for a longer period of time than those in this case, where the advertising budget for the challenged campaign was larger, and where there was higher consumer recall of the specific challenged claims. RRAB 47.

We disagree that such a comparison counsels against corrective advertising here. First, we have frequently noted that the amount of evidence in *Warner Lambert* was unusually strong and far exceeded the threshold needed to impose corrective advertising. "We emphasize that we do not believe corrective advertising may only be imposed where there is an evidentiary basis like that in *Warner-Lambert*." *American Home Prods.*, 98 FTC at 408 n.93 (citations omitted).⁴¹ Second, none of the three cases relied upon by respondent involved comparable evidence to support a corrective advertising remedy. In *Bristol-Myers Co.*, 102 FTC 21 (1983), complaint counsel introduced "no evidence" that misbeliefs would likely linger. *Id.* at 380. We declined to infer a likelihood of lingering solely from the face of the challenged ads. *Id.* Similarly, in *American Home Products*

⁴⁰ In any event, in a mature market, such as OTC analgesics, a central purpose of advertising is to retain current users and a key criterion for an ad campaign's success is whether it is succeeding in maintaining share, particularly in the face of a competitive onslaught. IDF 335; Stewart Tr. 3467. We find that Doan's was able to maintain and even increase its sales in light of the competitive pressures of new entrants in the back pain category and affirm the ALJ's finding on this point. IDF 336.

⁴¹ See, *supra*, footnote 23.

Corp., we refused to infer a likelihood of lingering merely from the nature of the ads notwithstanding a total absence of evidence on that issue in the record.⁴² 98 FTC at 409. In *Sterling Drug, Inc.*, 102 FTC 395 (1983), we found that the misrepresentations had not created or reinforced misbeliefs in light of studies conducted both before and after the challenged campaign revealing the same levels of consumer misbeliefs.⁴³ *Id.* at 798. These cases are easily distinguished from this one, where extensive evidence supports each prong of the corrective advertisement test.⁴⁴

Respondent next contends that low unaided brand awareness, evinced by consumer survey testing, demonstrates that the ads did not convince consumers that Doan's is more effective than other brands,⁴⁵ RAB 39-40, 73-75; RRAB 59, and thus no misbeliefs can linger. The advertising penetration data are not probative. Apart from the serious methodological flaws with the belief studies noted above,⁴⁶ this low brand awareness -- even assuming it exists -- is relevant only to the magnitude of the harm that respondent's false ads caused, and not to the likelihood that such harm as was caused will linger.

The ALJ found that the ARS and ASI studies, revealing 2 to 8% recall of a "more effective" or a "good product/better/best" message after 24 and 72 hours, suggest that any misbelief may be transitory. *Id.* at 64. We disagree. These were communication studies that asked what the ad said or showed, not what consumers believed about the product. The data from these tests thus do not establish the nonexistence of consumer misbeliefs. Consumers may hold beliefs about a product without recalling advertising that contributed to such

⁴² Some of the claims in that case were also secondary to the main message of the ads. 98 FTC at 408.

⁴³ Complaint Counsel in that case conceded that the frequency of misbeliefs was not altered by the challenged ad campaign, but argued that the misbeliefs "nonetheless became 'sharper'" as a result thereof. 102 FTC at 799.

⁴⁴ The dissent's emphasis upon the duration of the advertising campaign and dollars spent in these cases neglects the absence in those cases of sufficient evidence demonstrating a likelihood of lingering misbeliefs. This analysis cannot be reduced to a rigid algorithmic inquiry.

⁴⁵ The Aleve Tracking Study indicates that Doan's had a 2 to 3% unaided brand awareness in December 1994 and June 1995, respectively. RX 101-t. None of the 423 respondents in the Whitcup belief study reported "top-of-mind" awareness of Doan's advertising. RX 2-o.

⁴⁶ For example, the Aleve Tracking Study focused on general analgesics and was not confined to backache sufferers; thus, it is not surprising that consumers did not mention Doan's, which is not marketed as a general analgesic. Moreover, Novartis' own expert, Dr. Jacoby, conceded that penetration studies are of questionable value in measuring consumer beliefs about a product. People can form and retain beliefs based upon an ad without recalling it. Jacoby Tr. 3201.

beliefs. *See* Jacoby Tr. 3201. This is especially true with respect to a credence good, such as an OTC analgesic, for which consumers cannot easily evaluate the truth or falsity of claims. Moreover, the studies do not even purport to measure the duration of misbeliefs among those who were, in fact, misled, which is, after all, the relevant inquiry.

The record establishes that consumers held misbeliefs about Doan's superior efficacy, that such beliefs were created by or substantially reinforced by the challenged advertising campaign, and that those beliefs are likely to linger into the future. Therefore, we find that the elements for corrective advertising are satisfied, and that corrective advertising is appropriate and necessary.

Corrective advertising is appropriate for an additional reason. We previously discussed the factors which, separate from the NFO study, support an inference that misbeliefs about the superior claim are likely to linger. Another inference arises under these facts. We cannot turn a blind eye to the obvious relationship between an absolute efficacy claim ("this product works"), which Doan's has been running for ninety years, and a comparative efficacy claim ("this product works better than others"). Given that Novartis' advertising campaign fostered a symbiotic relationship between these two claims, simply to permit Novartis to return to its ninety-year old positioning of Doan's as a backache product makes it all the more likely the misbeliefs will linger -- absent some corrective action.

3. Content of the Corrective Message

Dr. Mazis testified that, as a general matter, proper corrective advertising accomplishes its intended effect of dissipating misbeliefs over time. IDF 358-59. Studies designed to track the impact of corrective advertising imposed in *RJR Foods, Inc.*, 83 FTC 7 (1973) and *Warner Lambert* support this conclusion. IDF 360.

The corrective message should (1) state that Doan's products are effective; (2) correct the lingering misbelief that Doan's products are superior to other products; and (3) permit respondent to continue to advertise Doan's specifically for back pain.⁴⁷ The following corrective message proposed by complaint counsel satisfies all of these requirements: "Although Doan's is an effective pain reliever,

⁴⁷ The FDA monograph allows pain-specific advertising, and Novartis is free to make claims specifically allowed by FDA.

there is no evidence that Doan's is more effective than other pain relievers for back pain." We find that this slightly longer version of the corrective message is more balanced than the suggested alternatives for shorter television or radio ads. We recognize the FDA monograph allows pain specific advertising and do not want to impede Novartis' ability to make claims specifically allowed by FDA. For all these reasons, the corrective message in the present matter is inevitably somewhat complex.

Both parties conducted studies to test the effectiveness of this corrective message. Dr. Mazis tested the message in FSIs in a telephone survey involving 370 consumers.⁴⁸ Dr. Mazis concluded that the corrective message was effectively communicated with a very low level of miscommunication of the unintended message that Doan's is less effective.⁴⁹ Dr. Jacoby criticized the study because he did not believe that a mail panel method was appropriate to test the corrective message as a general matter. He also criticized the use of FSIs to test the corrective message since FSIs were not a large part of the advertising campaign.

Dr. Whitcup conducted a study of the same corrective message using a mall intercept methodology with the corrective message placed on the product package. Dr. Whitcup concluded that the corrective message did not convey the intended message to consumers⁵⁰ -- of the 35% who saw the disclaimer, 10% got it wrong. Dr. Whitcup argued that number to be high given the small number who recalled the disclaimer at all. Accordingly, he concluded that the corrective message did not do a good job of communicating its message. Dr. Mazis criticized the Whitcup study, noting that the

⁴⁸ Of the respondents, 145 were Doan's users and 225 were non-users who were aware of Doan's. CX 489.

⁴⁹ In response to the question, "What did the ad say or imply about Doan's?" 38% of the participants indicated that Doan's was the same as or was not proven to be better than other medicines. Only 3 to 4% indicated that it was better or worse. CX 489-p. In response to closed-ended questions regarding what the ad said or implied about Doan's effectiveness for back pain in comparison to other medicines, 69% replied that it was the same or not proven to be better. Between 5 and 8.8% reported that it was better or worse. CX 489-x. Finally, in response to closed-ended questions about what was implied or stated, 75% agreed that the ad implied that Doan's is about as effective for back pain as other OTC pain relievers. None said it was less effective and 17% said it was more effective. CX 489-z.

⁵⁰ In response to an opened-ended question asking what the package said, showed or implied about the product, 15% responded that they understood that Doan's was not more effective than other pain relievers. RX 110-q. In response to a closed-ended question as to whether the package compared effectiveness of the product to the effectiveness of other pain relievers, 35% said yes, but 6% said the product was better and 4% said it was worse and 24% said it was the same. RX 110-v.

corrective message appeared in a cluttered context. He found that the message was inconspicuous and difficult to read. Mazis Tr. 1353-56.

We find that the Mazis study is probative of the effectiveness of the corrective message. We also find that the Whitcup package study actually confirms the effectiveness of the corrective message. We believe that the different levels of communication between the Whitcup product package study and the Mazis FSI study result from their differences in the conspicuousness of the disclosure and the fact that packages contain a great deal more information than advertising.

Although we have no data to determine at what level the message would be communicated in a 15-second television or radio ad, we believe that the corrective message would be difficult to communicate in such a short ad without unduly restricting respondent's ability to also convey its advertising message. Accordingly, we require that the corrective message appear on all advertising except television and radio ads that are 15 seconds or less in duration. The corrective message must also appear on the product package. Including the corrective message on the product packaging is especially important because, as Dr. Whitcup testified, packaging is a particularly ubiquitous form of advertising in that people have to pick up the product in order to purchase it. Dr. Whitcup also noted that in deciding what product to buy, consumers may compare packages. See Whitcup Tr. 2286.

We reject complaint counsel's recommendation that the duration of the corrective message be determined by a performance standard. In *Egglands Best*, we required the corrective message to appear on the package for one year. 118 FTC 340, 357. In *Warner Lambert*, we required the corrective message to appear in all advertising until the respondent had expended a sum equal to the average annual Listerine advertising budget for a ten-year period. 86 FTC 1514-1515. The Court of Appeals affirmed, stating: "[T]he corrective advertising order in this case, by tying the quantity of correction required to the investment in deception, is tailored to serve the legitimate governmental interest in correcting public misimpressions as to the value of Listerine and no more." In a footnote, the court went on to say: "As a result, any imprecision in the order's scope would seem likely to inure to Warner-Lambert's benefit." 562 F.2d 771.

We believe that a hybrid approach -- advertising expenditures and specific length of time -- is the best method for determining when the

corrective message should terminate. If we were to require that the corrective message appear in advertising until Novartis has expended a specific amount of money on advertising, Novartis could choose to advertise for a short period of time in an expensive way. If we were to require the corrective message to appear only for a specific period of time, then Novartis could choose not to advertise for that period of time.⁵¹ Accordingly, we order that the corrective message appear for one year on all packaging and advertising, except radio and television ads of 15 seconds or less in duration, and until Novartis has expended on Doan's advertising an amount equal to the average spent annually during the eight years of the challenged campaign.⁵² In contrast to complaint counsel's proposed performance standard, as the Court of Appeals found in the *Warner Lambert* matter, any imprecision in the scope of the order is likely to inure to Novartis' benefit.⁵³

Respondent argues that complaint counsel's proposed corrective advertising order violates the First Amendment. RRAB 106. Respondent argues that the corrective message does not convey the intended message and may be confusing. In addition, it argues that the corrective notice will be punitive because it will have a negative influence on consumers' beliefs about Doan's. RRAB 104. Further, it argues that the message would force it to abandon the 15-second ad format. RRAB 110. Finally, it argues that the corrective message "carries an unacceptable risk of forcing Doan's to abandon its back pain specific positioning and thus forcing Doan's off the market." RRAB 106. These arguments rely on respondent's assumption that the corrective message could be perpetual because of the performance standard suggested by complaint counsel.

We reject these arguments. First, the corrective remedy is of a finite duration. Second, it will not force respondent to abandon 15-second ads because it does not apply to such ads. Third, the corrective message was effectively communicated and is not unduly confusing or misleading. Finally, it is not punitive to require respondent to tell the truth.

⁵¹ Indeed, an internal Novartis document suggests that if we order corrective advertising, they could stop advertising for three years. See CX 110-c.

⁵² Respondents spent \$65.3 million on advertising between 1988 and 1996. JX 2d ¶ 21. The average annual expenditure on advertising is \$8 million.

⁵³ Dr. Mazis' expert testimony was that the belief that Doan's is more effective than other OTC pain relievers for back pain will likely linger for a long time after the claim is no longer disseminated. Mazis Tr. 1255-56. Dr. Mazis' expert opinion is supported by three empirical studies that evaluated the effects of Commission corrective advertising orders. IDF 359.

We now turn to the specific First Amendment arguments. Respondent asserts that complaint counsel's proposed corrective advertising provision would prevent it from truthful speech and require it to underwrite speech about the merits of other brands. RRAB 107-108. It relies on *Ibanez v. Florida Dep't of Bus. & Prof'l Regulation*, 512 U.S. 136 (1994). That case involved a reprimand by the Florida Board of Accountancy ("Board") of a Florida attorney for including her Certified Public Accountant and Certified Financial Planner credentials in her advertising and other communication to the public. *Id.* at 139-41. The United States Supreme Court noted that the challenged statements were true and that the government had nothing more than speculation or conjecture to support its fear that the listing of her credentials would, in fact, mislead consumers, by implying compliance with the relevant state accountancy regulations. *Id.* at 143, 144-47. In the present matter, we are not dealing with an across-the-board ban on truthful speech as was the case in *Ibanez*, but with commercial speech which was subject to an adjudicative proceeding and was found to be deceptive.

While commercial speech is entitled to First Amendment protection, misleading speech is not protected and may be banned entirely. *Central Hudson Gas & Elec. Corp. v. Public Serv. Comm'n*, 477 U.S. 557 (1980). Nonmisleading commercial speech may be regulated if the regulation meets a three-prong test: (1) the government's interest in regulating the speech must be substantial; (2) the regulation must materially and directly advance these interests; and (3) the regulation must be no more extensive than is necessary.⁵⁴ *Id.* at 566.

We apply the *Central Hudson* test to the facts of this case. First, the government has a substantial interest in protecting consumers from deception. See *Warner Lambert*, 562 F.2d at 771. Thus, the first prong of the test is satisfied.

With respect to the second prong, we find that the corrective advertising remedy directly and materially advances the aforementioned governmental interest. We have determined that the challenged advertising has created or substantially reinforced misbeliefs in the minds of consumers and that those beliefs are likely to linger into the future. As discussed above, the corrective

⁵⁴ Although decided before *Central Hudson*, *Warner-Lambert* addressed the First Amendment issue and concluded that the First Amendment did not bar a corrective advertising order. 562 F.2d 768-71 (supplemental opinion on petition for rehearing).

advertising remedy we order has been copy tested by both parties, and the results show that it effectively communicates the desired message. Accordingly, we conclude that the corrective advertising remedy advances the governmental interest in preventing future deception by correcting the lingering effects of Doan's past false advertising.

Finally, we conclude that the remedy is no more extensive than necessary. Our order is narrowly drafted to correct the misbelief at issue. We have balanced the need for correcting the lingering misbeliefs of consumers against Novartis' ability to advertise effectively. In doing so, we have been mindful of imposing less restrictive alternatives where appropriate. Therefore, we have specifically exempted television and radio ads whose duration is 15 seconds or less to achieve the proper balance. Accordingly, we find that the last prong of *Central Hudson* has been satisfied.

V. CONCLUSION

After a careful review of the entire record and after consideration of all the arguments made by the parties, we believe that Doan's advertising claims were material, the required elements of corrective advertising have been satisfied, and a corrective advertising remedy is appropriate.

APPENDIX

I. THE ATTITUDE & USAGE STUDY

After acquiring the Doan's brand, Ciba wanted to gain a better understanding of the backache category and engaged Arbor, Inc. to conduct an Attitude & Usage Study ("A&U"). CX 221. The specific goals of the 1987 A&U study were to determine awareness and use of Doan's user profiles, brand perception, and reactions to a new Doan's concept.¹ CX 221-h. A total of 390 telephone interviews were conducted.² Almost all respondents were aware of Doan's. CX 221-t. Despite Doan's high brand and advertising awareness, Doan's has been tried by less than one third of backache sufferers. CX 221-v.

¹ The new concept was an extra strength product.

² Respondents were qualified if they were 18 years or older, suffered from backaches in an average six month period, usually treat backaches with either prescription or non prescription products, and either purchase the products themselves or decide what product is to be bought. An additional 45 consumer who had used Doan's in the past six months were included in the study in order to have 75 users. CX 221-i.

In the portion of the study relating to brand perception, one question asked the respondents to rate the brands they were aware of on 14 different attributes. One of the attributes listed was: "Is the most effective pain reliever you can buy for backaches." CX 221-x. The results for this question show that on mean values, Doan's was at 4.4, which was third after Extra-Strength Tylenol, 5.1, and Advil, 4.8. Bayer was fourth at 4.2. CX 221-z-72.

A summary memorandum from the Ciba consumer research department regarding the A&U study to Hal Russo, a member of the marketing department, described the results of the study by saying:

Overall, Doan's competes in a broad arena, dominated by general purpose analgesics. Doan's has a weak image in comparison to the leading brands of analgesics and would benefit from positioning itself as a more effective product that is strong enough for the types of backache sufferers usually get. Care must be taken in positioning the brand as efficacious so that Doan's is not perceived to be only for very bad back pain. Being seen as for only back pain appears to limit usage occasions and may cause the product to be seen as too strong for frequent use. (emphasis in the original) CX 221-c,d.

The study also noted: STRONG ENOUGH FOR ME is the most important dimension tested and was almost twice as important as the next most important dimension GOOD VALUE. MAXIMUM STRENGTH AND SAFE are the next most important. If a brand is perceived as being for BAD PAIN ONLY, it loses on preferences. Being BACKACHE SPECIFIC is not important. (emphasis in the original) CX 221-z-7.

The study also revealed that Doan's users are more likely to claim to use Extra-Strength Tylenol more often than they are to use Doan's. CX 221-z-21.

The results of the A&U study were used to help create new Doan's advertising. The first new Doan's ad that was created and disseminated after this study was the "Graph" ad. Peabody Tr. 146.

II. BRAND EQUITY STUDY

Five years later, in 1993, Ciba conducted the Brand Equity Study. CX 256. The goal of the study was to establish the current equity and brand image of Doan's and its major competitors in the backache category, to explore how the Doan's position might be optimized versus the incumbent competition, and to establish if there were any other categories where there might be an opportunity for Doan's. CX 256-f. The study was conducted via mall intercept in 10 locations. A total of 336 interviews were conducted among males and females

who suffer from back pain and treat their back pain with OTC products in pill form. All of the respondents were aware of Doan's. CX 256-g.

One aspect of the Brand Equity study was to evaluate how Doan's was perceived on a set of attributes compared to other analgesics used to treat back pain. Specifically, one question listed 21 attributes and used a grid of six boxes adjacent to each of the attributes. CX 260-b. The left hand box was labeled "Unacceptable, brand couldn't be worse." The right hand box was labeled "Ideal, nothing could make brand better." In the middle, above the dividing line on the grid, was the label "Good." Respondents were asked to rate each of a group of analgesics products they were aware of for the treatment of back pain on each of the 21 attributes.

Dr. Mazis created a summary of some of the data obtained from this question because the report itself did not contain a detailed discussion of the results. The data for both users and aware non-users are presented both in terms of "top box" - the right hand box rated "ideal" -- and the "top two box" results -- the boxes to the left of "Ideal." For users of the products, about twice as many people put Doan's in the top box of being particularly effective for back pain as compared to the three all-purpose analgesics -- Tylenol, Advil, and Motrin. CX 480-a. For Doan's aware non-users, the results were also higher than for the other brands, albeit at a lower level. CX 480-c.³

An Executive Summary describing the study to Ciba management highlights one of the key findings as: "The brand is seen as particularly effective for back pain, and as having a special ingredient." CX 256-c.

The FY'95 Marketing Plan suggests continuing to build on Doan's heritage as "The Back Specialist." It noted that the '93 Brand Equity Study that showed the specificity of Doan's positioning as communicated by the "Back Specialist" has helped differentiate the brand from other pain relievers. It went on to note that: "Clearly this unique positioning has contributed to this as the Equity Study showed the top two attribute ratings for Doan's were ingredients especially for back pain (49%) and Effective for back pain (44%)" CX 387-y.

³ Twenty percent of aware non-users rated Doan's top box for the attribute particularly effective for back pain, while 7.1% put Extra Strength Tylenol in the Top Box category, 5.3% did for Advil, 6.6% for Motrin IB.

III. NFO STUDY

Dr. Mazis conducted a belief study for this litigation using National Family Opinion, Inc. ("NFO") a marketing research company which provides mail panel research.⁴ Mail panel research involves mailing research instruments to individuals who have previously agreed to serve as survey respondents. These individuals then complete and return the research instrument to NFO by mail. NFO sent a screener questionnaire to 40,000 households in October 1996 to identify back pain sufferers/treaters who were Doan's users or aware non-users. CX 420-h. In December 1996, NFO conducted a follow-up survey consisting of 400 Doan's users and 400 Doan's aware non-users selected on a random basis from the larger population of both groups identified on the multi-card screening survey. CX 421-h.

Dr. Mazis concluded that users and aware non-users constituted the appropriate universe for testing beliefs because those who had never heard of the product could not have beliefs about the product. Mazis Tr. 1122. The purpose of the study was to assess beliefs on a number of attributes, but in particular, the "more effective for back pain" attribute and to compare the beliefs of users of Doan's to users of other analgesics for back pain relief, and aware non-users of Doan's to aware non-users of other analgesics.⁵ Mazis Tr. 1129-30. The purpose of comparing users and aware non-users was to take into account and control for usage effect.⁶ Mazis Tr. 1199-1201.

A total of 549 households returned surveys. CX 421-h. The results of the NFO belief study summarized in CX 482 show that over three-

⁴ The mail panel NFO maintains is a bank of over 500,000 households who have agreed, in advance, to participate in research projects. Clarke Tr. 9.

⁵ The questionnaire presented ten attribute statements and asked respondents to rate each statement on a seven-point scale, ranging from strongly agree to strongly disagree. CX 421 z-12. The list of ten belief attributes was chosen to include the belief of primary interest in this case, "Is more effective than other OTC pain relievers for back pain relief," as well as two other belief statements that tracked claims made in Doan's advertising: "Has an ingredient especially for back pain" and "Is just for back pain." Mazis Tr. 1133. The other attributes were: (1) Is just for headaches, (2) Is safe to use, (3) Has an ingredient especially for headaches, (4) Is gentle on the stomach, (5) Is effective for all kinds of pain, (6) Is more effective than other OTC pain relievers for headache relief, and (7) Is safer to use than other OTC pain relievers. CX 421-z-12. In addition, each questionnaire also asked respondents to write in their age and sex in spaces provided at the end of the questionnaire as a control procedure to guard against the possibility that the wrong member of the household completed the questionnaire. When the questionnaires were returned, NFO cross-checked this age and sex information against their records. Clarke Tr. 40.

⁶ The marketing phenomenon called "usage effect" is the tendency of users of a product to give the product a higher rating than non-users of the product. Mazis Tr. 992.

quarters (77%) of the Doan's users believe Doan's is superior. Between 41 and 62% of users of other brands reported superiority beliefs about their brands. Forty-five percent of Doan's aware non-users held a superiority belief about Doan's, whereas only 17 to 35% of aware non-users of the comparison brands believed those products to be superior to other analgesics. Dr. Mazis concluded that the data for both Doan's users and aware non-users compared to users or aware non-users of each of the five other OTC analgesic products⁷ show that the level of superiority beliefs for Doan's is substantially higher than it is for any of the competing products. Mazis Tr. 1151.

Dr. Mazis also undertook an analysis of joint users and joint aware non-users of the various products in order to compare their beliefs about Doan's and their beliefs about other products. Mazis Tr. 1159. This analysis shows disproportionate percentages of both Doan's users and aware non-users believing that Doan's is more effective for back pain. For example, Dr. Mazis looked at individuals who used both Advil and Doan's and compared their beliefs about Advil to their beliefs about Doan's. On average, the proportion of joint users agreeing that Doan's is more effective for back pain than other OTC analgesics was 26% higher than those agreeing that the other brands were more effective. IDF 262, 263; Mazis Tr. 1171-74. This analysis was done for each set of products for aware non-users. On average the proportion of joint aware non-users agreeing that Doan's was more effective for back pain than other OTC analgesics is almost 20% higher than the proportion agreeing that the other brands were more effective. IDF 264, 265; Mazis Tr. 1175-76. Using a two-tailed test, Dr. Mazis calculated that all of the observed differences in the user-to-user comparison for the attribute "more effective for back pain" were statistically significant at the .05 level, as were four of the five⁸ aware non-user to aware non-user comparisons for the same attribute. Mazis Tr. 1187-89. Dr. Mazis also analyzed the NFO data by applying the Bonferroni adjustment to correct for experiment-wise error. Even after making these adjustments, the results remained statistically significant. Mazis Tr. 1190-96.

⁷ Advil, Aleve, Bayer, Motrin, and Tylenol.

⁸ The Motrin non-user non-user comparison was not statistically significant at the .05 level. Mazis Tr. 1189.

IV. ALEVE TRACKING STUDY

In 1994, Procter & Gamble introduced Aleve. Weeks after introduction, Aleve became the number 3 brand with a 6.5% share of the \$2.6 billion general analgesic category. RX 101-c. The advertising compared Aleve to other brands directly by name. In 1995, Ciba conducted the Aleve Tracking Study with the objective of monitoring the first year's progress of Aleve's national introduction in order to determine the impact on the OTC analgesic category generally, on major brands, and on the backache segment in particular. RX 101-d. Telephone interviews were conducted in two waves among nationally-projectable samples of those 18 years of age or older who used an analgesic product in the past year.⁹ RX 101-e.

In connection with the study, Ciba obtained information about Doan's. The results of this study indicate that Doan's had between a 2 and 3% unaided brand awareness among the respondents. RX 101-f. However, on an aided basis, the results were higher at between 71 and 75%. RX 101-u.

V. JACOBY STUDY

Dr. Jacoby's study, conducted in late 1996, for this litigation, sought to measure both the materiality of the challenged claim as well as the beliefs created or reinforced by the Doan's campaign. Specifically, he sought to determine whether consumers exposed to the challenged Doan's advertising extracted a "more effective" claim, the basis for such a claim, and whether any such "more effective" claim was material to consumers. In addition, Dr. Jacoby also sought to determine whether there were any lingering effects of the implied superiority claim RX 5-z-82, 83. The study tested consumer beliefs first, without exposure to the challenged ads.

Dr. Jacoby's universe included 684 men and women, at least 18 years old, who in the past year had purchased, or in the past six months had used, a non-prescription medicine to relieve backache or back pain.¹⁰ RX 5-z-85, 87. Dr. Jacoby specifically included consumers who were not aware of Doan's as long as they satisfied the other criteria. Jacoby Tr. 2936. The study was conducted via mall

⁹ Of the respondents, between 39 and 42% had used an OTC pain reliever in the past year to treat a backache. RX 101-z-33.

¹⁰ Dr. Jacoby's universe included people who may not have suffered from back pain, but purchased the product. Dr. Jacoby reanalyzed the data after becoming aware of this fact and concluded that 95% of his survey respondents were themselves backache sufferers/treaters. Jacoby Tr. 3140.

intercept in sixteen geographically dispersed markets, in each U.S. Census Division. RX 5-z-89.

The first three questions asked the respondents which products they had used during the past year. By aggregating the answers to these questions, the data show that 21%, or 123 respondents had used Doan's; 71% had used Tylenol; 58% Advil; 31% Aleve; 28% Motrin; and 21% Bayer. RX 5-z-104. There is no information in the study as to what percent of the respondents were aware of Doan's. Next, respondents were asked whether certain brands were more effective. Seven percent of the 684 respondents rated Doan's as more effective, compared to 13% who reported Advil more effective, and 12% who reported that Tylenol is more effective. RX 5-z-105. When analyzing the data further, 38% of the Doan's users reported Doan's as "more effective" in contrast to 23% of Advil and 17% of Tylenol users who reported their brands as more effective. *Id.* The study also showed that many more respondents attributed their usage of Doan's to personal experience (42%) than to advertising (11%).¹¹ RX 5-z-108-09. Dr. Jacoby also asked whether the respondents recalled any advertising and what it is they recalled from the advertising. The results indicate that for Doan's users, 48% did not recall any ads and that of those who did recall advertising, 44% remember a visual about the ad, 36% mentioned relief of back pain, and 3% mentioned superiority.¹² RX 5-z-110.

VI. WHITCUP STUDY

Dr. Whitcup's belief study was conducted, for this litigation, between February and April 1996. RX 2. It attempted to measure consumer awareness of Doan's and of Doan's advertising. Specifically, Dr. Whitcup attempted to access consumer beliefs about Doan's concerning its effectiveness for relief of back pain that may be the results of prior advertising, product usage, word of mouth, and other factors, as well as to ascertain whether or not Doan's is perceived by relevant consumers as containing a special ingredient for back pain that other OTC analgesics do not contain. RX 2-c.

There were a total of 423 respondents who were men and women aged 18 or older, who have used an OTC analgesic in pill form in the

¹¹ Interestingly, only users of Doan's reported that advertising was the basis for their belief.

¹² The ALJ stated that it was agreed at trial that the fact that respondents played back a general recall of Doan's ads, does not establish that they did not form a superiority belief from their exposure to Doan's ads. IDF 288.

past year, taken an OTC pain reliever in the past year for back pain, and have no one in their household employed in an industry or with atypical knowledge of pain relievers. Interviewing was conducted by telephone using random digit dialing. RX 2-e. The study was administered under "double blind" conditions where neither respondents nor interviewers were aware of the identity of the sponsor nor the true purpose of the study. RX 2-g. Only 35 respondents had used Doan's RX 2-z-49. In contrast, 190 of the respondents had used Tylenol and 121 had used Advil. *Id.* As a result of the small number of Doan's users in this study, Dr. Whitcup added the letter "c" ("caution small base") whenever he presented data based on their responses. *See e.g.* RX 2-q, s.

After screening for qualifications, respondents were asked a series of questions designed to measure their awareness and use of OTC analgesic brands and their advertising. RX 2-e. Specifically, the first question asked what brand of OTC pain relievers first came to mind. In response to this question 1% of the 423 respondents reported awareness of Doan's in comparison to 51 and 18% of the 423 respondents who mentioned Tylenol and Advil. RX 2-n. Other questions asked respondents to recollect which OTC pain relievers they have seen or heard ads for. No respondents reported top-of-mind awareness of Doan's advertising, in comparison to 36% and 20% who reported top-of-mind awareness for Tylenol and Advil respectively. RX 2-o. Other questions asked what brands respondents used in the past year to treat back pain. Eight percent indicated that they used Doan's in comparison to 45% and 29% who indicated that they used Tylenol and Advil respectively. RX 2-p. Finally, in response to a question asking which brands were most effective, 8% believed Doan's was more effective. RX 2-u. Dr. Whitcup acknowledged that the 8% superior efficacy belief measured for Doan's is at about the same level as Tylenol and Advil. Whitcup Tr. 2816.

VII. THE LAVIDGE STUDY

The Lavidge Study was conducted from October 1996 through January 1997. RX 23-a. It was designed for this litigation with the purpose of determining both what claims the "muscles" ads conveyed and whether consumers held a belief that Doan's contains an ingredient the other products do not have. RX 23-e. The universe included people 18 - 34 years of age who had experienced back pain

within the past 2 months and had taken OTC pain relievers for back pain within the past year. RX 23-f. Seventy one percent of the sample were unaware of Doan's. RX 182.

The Lavidge study was divided into three tests with a total of 750 respondents. RX 23-b. This test was also conducted under double blind conditions using a mall intercept approach in ten cities throughout the U.S. RX 23-e. The respondents were shown TV ads for four OTC products marketed for the relief of back pain -- Advil, Bufferin, Doan's and Tylenol. The Doan's ad used in Tests 1 and 3 was the challenged Muscle's ad, and the Doan's ad used in Test 2 was an unchallenged Doan's ad. Immediately after viewing the ads in Test 1 and Test 2, consumers were asked questions to evaluate the impact of the advertising on their beliefs. The Test 3 participants were asked follow-up questions 11 days later.

The study asked respondents questions about their beliefs after exposure to a clutter tape of ads which included both challenged and unchallenged Doan's ads as well as three other 15 second ads for other analgesic products promoted for back pain relief. Immediately after viewing the ads, 57% of the 499 respondents in two of the tests indicated that they did not believe that any OTC analgesic was more effective than others for the relief of back pain RX 23-j; RX 181. After exposure to the challenged Muscles ad, 5.2% of 249 respondents indicated that they believed that Doan's was more effective for relieving back pain. RX 23-j. Six percent of 250 respondents who saw the unchallenged Muscles ad believed that Doan's was more effective. RX 23-j; RX 181. In comparison, 10.6 % of the 499 respondents believed that Tylenol was more effective and 9.6% believed that Advil was more effective. *Id.* Of those who saw the challenged Muscle's ad and were questioned eleven days later, 3.1% believed that Doan's was more effective. *Id.*

FINAL ORDER

For purposes of this Order:

1. "*Doan's*" shall mean any over-the-counter analgesic drug, as "drug" is defined in the Federal Trade Commission Act, bearing the Doan's brand name; including, but not limited to, Regular Strength Doan's analgesic, Extra Strength Doan's analgesic, and Extra Strength Doan's P.M. analgesic.

2. "*Competent and reliable scientific evidence*" shall mean tests, analyses, research, studies, or other evidence based on the expertise of professionals in the relevant area, that has been conducted and evaluated in an objective manner by persons qualified to do so, using procedures generally accepted in the profession to yield accurate and reliable results.

3. "*Advertisement*" shall mean any written, oral or electronic statement, illustration or depiction which is designed to create interest in the purchasing of, impart information about the attitudes of, publicize the availability of, or affect the sale or use of goods or services, whether it appears in a brochure, newspaper, magazine, free standing insert, marketing kit, leaflet, circular, mailer, book insert, letter, catalogue, poster, chart, billboard, public transit card, point-of-purchase display, package insert, package label, product instructions, electronic mail, website, homepage, film, slide, radio, television, cable television, program-length commercial or "infomercial," or in any other medium.

I.

It is ordered, That respondents Novartis Corporation, and Novartis Consumer Health, Inc., corporations, their successors and assigns, and their officers, agents, representatives and employees, directly or through any corporation, subsidiary, division or other device, in connection with the manufacturing, labeling, advertising, promotion, offering for sale, sale, or distribution of Doan's or any other over-the-counter analgesic drug, in or affecting commerce, as "drug" and "commerce" are defined in the Federal Trade Commission Act, do forthwith cease and desist from representing, in any manner, directly or by implication, that such product is more effective than other over-the-counter analgesic drugs for relieving back pain or any other particular kind of pain, unless, at the time of making such

representation, respondents possess and rely upon competent and reliable scientific evidence that substantiates the representation. For purposes of Part I of this Order, "competent and reliable scientific evidence" shall include at least two adequate and well-controlled, double-blinded clinical studies which conform to acceptable designs and protocols and are conducted by different persons, each of whom is qualified by training and experience to conduct such studies, independently of each other.

II.

It is further ordered, That respondents Novartis Corporation, and Novartis Consumer Health, Inc., corporations, their successors and assigns, and their officers, agents, representatives and employees, directly or through any corporation, subsidiary, division or other device, in connection with the manufacturing, labeling, advertising, promotion, offering for sale, sales or distribution of Doan's or any over-the-counter analgesic drugs in or affecting commerce, as "drug" and "commerce" are defined in the Federal Trade Commission Act, do forthwith cease and desist from making any representation, in any manner, directly or by implication, regarding such product's efficacy, safety, benefits, or performance, unless, at the time of making such representation, respondents possess and rely upon competent and reliable scientific evidence that substantiates the representation.

III.

Nothing in this Order shall prohibit respondents from making any representation for any drug that is permitted in labeling for any such drug under any tentative final or final standard promulgated by the Food and Drug Administration, or under any new drug application approved by the Food and Drug Administration.

IV.

It is further ordered, That respondents Novartis Corporation, and Novartis Consumer Health, Inc., corporations, their successors and assigns, and their officers, agents, representatives, and employees, directly or through any corporation, subsidiary, division or any device, do forthwith cease and desist from disseminating or causing the dissemination of any advertisement for Doan's in or affecting commerce, as "commerce" is defined in the Federal Trade

Commission Act, unless the advertising includes the following corrective notice, clearly and prominently, in the exact language that follows:

"Although Doan's is an effective pain reliever, there is no evidence that Doan's is more effective than other pain relievers for back pain."

Provided, that respondents' obligation to include the corrective notice shall not be required for any television or radio advertisement of 15 seconds or less in duration.

Provided further, that respondents' obligation to include the corrective notice in all advertising shall continue for one year and until respondent has expended on Doan's advertising a sum equal to the average spent annually during the eight years of the challenged campaign.

V.

It is further ordered, That for a period of five (5) years after the last date of dissemination of any representation covered by this Order, respondents or their successors and assigns, shall maintain and upon request make available to the Federal Trade Commission for inspection and copying:

A. All materials that were relied upon in disseminating such representation; and

B. All tests, reports, studies, surveys, demonstrations or other evidence in their possession or control that contradict, qualify, or call into question such representation, or the basis relied upon for such representation, including complaints from consumers.

VI.

It is further ordered, That respondents shall:

A. Within thirty (30) days from the date this Order becomes effective, provide a copy of this Order to each of their current principals, officers, directors, and managers, and to all personnel, agents, and representatives having sales, advertising, or policy responsibility with respect to the subject matter of this Order; and

B. For a period of ten (10) years from the date this Order becomes effective, provide a copy of this Order to each of their future principals, officers, directors, and managers, and to all personnel,

agents, and representatives having sales, advertising, or policy responsibility with respect to the subject matter of this Order who are associated with them or any subsidiary, successor, or assign, within three (3) days after the person assumes his or her position.

VII.

It is further ordered, That respondents shall notify the Commission at least thirty (30) days prior to any proposed change in their corporate structures, including, but not limited to, dissolution, assignment, or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or affiliates, or any other corporate change that may affect compliance obligations arising out of this Order.

VIII.

It is further ordered, That this Order will terminate twenty (20) years from the date this Order becomes effective, or twenty (20) years from the most recent date that the United States or the Federal Trade Commission files a complaint (with or without an accompanying consent decree) in federal court alleging any violation of the Order, whichever comes later; provided, however, that the filing of such a complaint will not affect the duration of:

A. Any paragraph in this Order that terminates in less than twenty (20) years;

B. This Order's application to any respondent that is not named as a defendant in such complaint; and

C. This Order if such complaint is filed after the Order has terminated pursuant to this paragraph.

Provided further, that if such complaint is dismissed or a federal court rules that the respondents did not violate any provision of the Order, and the dismissal or ruling is either not appealed or upheld on appeal, then the Order will terminate according to this paragraph as though the complaint was never filed, except that the Order will not terminate between the date such complaint is filed and the later of the deadline for appealing such dismissal or ruling, and the date such dismissal or ruling is upheld on appeal.

IX.

It is further ordered, That respondents shall, within sixty (60) days from the date this Order becomes effective, and at such other times as the Federal Trade Commission may require, file with the Commission a report, in writing, setting forth in detail the manner and form in which they have complied with this Order.

STATEMENT OF COMMISSIONER ORSON SWINDLE
CONCURRING IN PART AND DISSENTING IN PART

Today, the Commission has decided to order corrective advertising based on a full adjudicative record for the first time in nearly 25 years. I agree with my colleagues that respondents Novartis and Novartis Consumer Health, Inc. (collectively "Novartis" or "respondents") made the unsubstantiated claim that their Doan's analgesic product is superior to other over-the-counter ("OTC") analgesics in treating back pain ("the superior efficacy claim"). I also agree that the traditional cease-and-desist provisions contained in Parts I and II of the Order, which would prohibit Novartis from making the same or similar deceptive claims in the future, are necessary and appropriate. Unlike my colleagues, however, I conclude that the evidence does not support the imposition of the corrective advertising remedy contained in Part IV of the Order.

Corrective advertising is intended to prevent the harm to consumers and competition that is caused when a false belief engendered by prior deceptive advertising lingers. Novartis made an implied superior efficacy claim for Doan's through short television advertisements that have not been disseminated since May 1996. The majority concludes that these advertisements caused a false superior efficacy belief that has lingered and is likely to continue to linger until the corrective advertising provision terminates in July 2000 or beyond. I disagree with this conclusion, because the evidence offered to prove lingering effect is extremely weak, consisting mainly of inconclusive extrinsic evidence, indefinite expert testimony and broad inferences. This evidence is certainly far weaker than the evidence that proved the existence of a lingering effect in *Warner-Lambert Co. v. FTC*, 562 F.2d 749, 762 (D.C. Cir. 1977), *modifying and enforcing* 86 FTC 1398 (1975). I conclude that this weak evidence does not prove by a preponderance of the evidence that the false superior

efficacy belief is likely to linger until July 2000 or beyond. Therefore, the Commission cannot order corrective advertising in this case.

I also conclude that the corrective advertising requirement, which is a form of compelled speech, infringes on Novartis's right to engage in commercial speech under the First Amendment to the United States Constitution. The Commission may compel Novartis to engage in corrective advertising only if the remedy "directly advances a substantial governmental interest" and is "no more extensive than necessary to serve that interest." *Central Hudson Gas & Electric Corp. v. Public Serv. Comm. of N.Y.*, 447 U.S. 557, 566 (1980). Because it has not been proven that the false superior efficacy belief in this case is likely to linger, there is no false belief that needs to be corrected to prevent deception; therefore, corrective advertising cannot directly advance any substantial governmental interest. In addition, because the majority opinion has not given adequate consideration to alternatives to corrective advertising or to less restrictive alternatives to the all-media corrective advertising remedy imposed (such as a corrective statement on the product label or point-of-sale materials), the Commission has not shown that the prescribed corrective advertising requirement here is no more extensive than necessary to prevent deception.

Corrective advertising is an extraordinary remedy that can serve the salutary purpose of preventing harm to consumers and competition. I have supported the imposition of corrective advertising provisions in those rare instances where the legal standard for its imposition has been satisfied and the remedy was otherwise warranted. I will continue to support the use of corrective advertising remedies in appropriate cases. But I am not willing to support a corrective advertising remedy in this case because the adjudicated record does not prove that any false superior efficacy belief is likely to linger and because the imposition of the remedy would be unconstitutional.

I. DECEPTION AND TRADITIONAL RELIEF

Before I turn to the question of corrective advertising, let me make clear that I concur in the majority's conclusions that Novartis's superior efficacy claim was deceptive and that the traditional cease-and-desist relief imposed by the order is necessary and appropriate. Administrative Law Judge Lewis F. Parker ("the ALJ") concluded that Novartis had violated Sections 5 and 12 of the Federal Trade

Commission Act, 15 U.S.C. 45, 52, by making the unsubstantiated claim that Doan's was superior to other OTC analgesics in treating back pain. Initial Decision ("ID") at 63-64. In its appeal from the ALJ's conclusion that the superior efficacy claim was deceptive, Novartis argued only that the claim was not material to consumers. I agree with the majority's conclusion that the superior efficacy claim was material, Majority Op. at 11-20, although not with all of the reasoning that supports this conclusion.¹ Accordingly, I agree that Novartis engaged in deception in violation of Sections 5 and 12 of the FTC Act.

The Commission has wide discretion in choosing a remedy to prevent Novartis from engaging in the same or similar deception in the future. The Commission may include provisions in its cease-and-desist orders that go beyond prohibiting the repetition of the deception that has been found, so long as such "fencing-in" relief bears a "reasonable relation" to the unlawful practices found. *FTC v. National Lead Co.*, 352 U.S. 419, 429 (1957); *Jacob Siegel Co. v. FTC*, 327 U.S. 608, 611-13 (1946). In determining the appropriate extent of fencing-in relief to remedy a law violation, the Commission considers the seriousness and deliberateness of the violations; the ease with which the unlawful conduct could be transferred to other products; and the respondent's history of violations. *See, e.g., Kraft, Inc.*, 114 FTC 40, 139-40 (1991), *aff'd*, 970 F.2d 311 (7th Cir. 1992); *Thompson Medical Co.*, 104 FTC 648, 833 (1984), *aff'd*, 791 F.2d 189 (D.C. Cir. 1986).

The Order here includes both core relief prohibiting Novartis from repeating its deceptive superior efficacy claim for Doan's and traditional fencing-in relief preventing similar violations. Part I prohibits Novartis from making any unsubstantiated claim that Doan's or any other OTC analgesic is more efficacious than other OTC analgesics for relieving back pain or any other particular type of pain. Part II also bars Novartis from making any unsubstantiated claim regarding the efficacy, safety, benefits, or performance of Doan's or any other OTC analgesic. Given the seriousness of

¹ The evidence does not prove that Novartis intended to make the claim or that it was able to charge a premium because of the challenged advertisements, Majority Op. at 13-15, and therefore I do not join in the majority's conclusion as to materiality to the extent that it relies on these findings. I agree with the majority that the effectiveness of the deceptive advertising campaign is not relevant to the issue of materiality, *id.* at 16-17, but I do not join in the majority's additional determination that the campaign was effective.

deceptive health claims and the ease with which Novartis could make similar unsubstantiated claims for Doan's or other OTC analgesics, both the core relief and the fencing-in relief included in Parts I and II of the Order are necessary and appropriate.

II. CORRECTIVE ADVERTISING

The majority also would require Novartis to undertake corrective advertising. Part IV of the Order mandates that Novartis make a specified corrective statement in all of its "advertising"² (except television or radio advertisements of 15 seconds or less in duration) for "one year and until the respondents have expended on Doan's advertising a sum equal to the average amount spent annually during the eight years of the challenged campaign." The prescribed corrective statement is: "Although Doan's is an effective pain reliever, there is no evidence that Doan's is more effective than other pain relievers for back pain."

A. Legal Standard

Corrective advertising is a type of fencing-in relief for which the court in *Warner-Lambert* adopted a higher standard than the "reasonably related" standard applicable to traditional forms of fencing-in relief. *Warner-Lambert*, 562 F. 2d at 762.³ In *Warner-Lambert*, the respondent spent "vast sums" on a 51-year advertising campaign making the false claim that Listerine mouthwash was effective in treating colds and sore throats. 86 FTC at 1468, 1502. In affirming the Commission's imposition of an approximately one-year corrective advertising requirement, the court held the Commission could impose a corrective advertising requirement if it concluded that "Listerine's advertisements play[ed] a substantial role in creating or reinforcing in the public's mind a false belief about the product" and "this belief [would] linger on after the false advertising ceases." 562 F. 2d at 762. The court relied on consumer surveys over many years

² "Advertising" is defined in the Order to include claims made in a brochure, newspaper, magazine, free standing insert, marketing kit, leaflet, circular, mailer, book insert, letter, catalog, poster, chart, billboard, public transit card, point-of-purchase display, package insert, package label, product instructions, electronic mail, website, homepage, film, slide, radio, television, cable television, program-length commercial or infomercial, or in any other medium.

³ See *California SunCare, Inc.*, 123 FTC 332, 391 (1997) (Statement of Commissioner Roscoe B. Starek, III, concurring in part and dissenting in part) (*Warner-Lambert* imposes a "more demanding standard for corrective advertising" than traditional fencing-in relief, such as affirmative disclosure requirements.).

and expert testimony in concluding that there was substantial evidence in the record as a whole to support these two factual prerequisites. *Id.* at 762 n.65. The *Warner-Lambert* court also concluded that the approximately one-year time period for the corrective advertising requirement was not "an unreasonably long time in which to correct a hundred years of cold claims." *Id.* at 764.

Since it decided *Warner-Lambert*, the Commission has considered the imposition of corrective advertising in three adjudicated cases, all of them involving claims made for OTC analgesics. *Sterling Drug, Inc.*, 102 FTC 395 (1983), *aff'd*, 741 F.2d 1146 (9th Cir. 1984); *Bristol-Myers Co.*, 102 FTC 21 (1983), *aff'd*, 738 F.2d 554 (2d Cir. 1984); *American Home Products Corp.*, 98 FTC 136 (1981), *aff'd as modified*, 695 F.2d 681 (3d Cir. 1982). In none of these cases, however, did complaint counsel prove the factual prerequisites for ordering corrective advertising -- that the deceptive advertisements substantially created or reinforced a false belief and that the belief was likely to linger -- and thus the Commission declined in each case to order corrective advertising. Because *Warner-Lambert* is the only adjudicated case in more than two decades in which the Commission has ordered corrective advertising, it provides the benchmark⁴ for determining whether the evidence proves⁵ the factual prerequisites for corrective advertising. I do not think that the evidence here proves these prerequisites.

B. Lingering Effect

In my view, corrective advertising cannot be ordered in this case because the evidence does not prove that any false superior efficacy

⁴ The majority states that the Commission "has frequently noted that the amount of evidence in *Warner-Lambert* was unusually strong and far exceeded the threshold needed to impose corrective advertising." Majority Op. at 30. As discussed below in the text, the Commission has simply recognized that inference, not direct evidence, may be used in appropriate cases. The availability of inference does not relieve complaint counsel of the burden of proving lingering effect by a preponderance of the evidence. Moreover, *Warner-Lambert* did set the standard for corrective advertising, and the evidence in that case is the only benchmark that we have for assessing the sufficiency of evidence supporting corrective advertising. See E. Levi, *An Introduction to Legal Reasoning* 2 (1949) (the extension of a rule of law to new facts "depends upon a determination of what facts will be considered similar to those present when the rule was first announced").

⁵ Complaint counsel has the burden of proving facts in Commission adjudications by a preponderance of the evidence. *Carter Products, Inc. v. FTC*, 268 F.2d 461, 487 (9th Cir. 1959); ABA Antitrust Section, *Antitrust Law Developments* 617 (4th ed. 1997) ("The burden of proof in a Commission proceeding is on complaint counsel to establish its case by a preponderance of the evidence.") (footnotes omitted); see 5 U.S.C. 556(d) ("[e]xcept as otherwise provided by statute, the proponent of a[n] *** order has the burden of proof.").

belief substantially caused by the deceptive advertising campaign is likely to linger.⁶ The majority concludes that the false superior efficacy belief will linger, but fails to address or even identify how long the belief must be likely to linger to support the corrective advertising remedy in this case. A false superior efficacy belief will not support corrective advertising unless it is likely to linger throughout the period during which the corrective advertising provision will be in effect. Without a lingering false belief, there is no more reason to impose a corrective advertising remedy than there is for a doctor to prescribe a remedy for a patient who has already recovered. Specifically, the false superior efficacy belief must exist at the time that the Commission's order becomes final -- that is, the date on which the corrective advertising provision must commence -- and must continue, albeit presumably at a decreasing level due to the effects of the provision, at least until the corrective advertising requirement expires.⁷ Hence, for the Commission to order corrective advertising in this case, the false superior efficacy belief would have to exist when the Order becomes final (in July 1999⁸) and would have to continue to exist until the corrective advertising requirement terminates (in July 2000 or beyond).⁹

The ALJ did not order corrective advertising because he was not persuaded that the evidence in the record proved that the false

⁶ I am assuming for the sake of argument that the majority is correct that the false superior efficacy belief was caused substantially by the deceptive advertising at issue, rather than by some other entirely plausible factor such as the introduction of new, extra strength Doan's products or the nine decades of positioning Doan's product as an effective remedy for back pain. Compare *Sterling Drug Co.*, 102 FTC at 798-99 (concluding that it was not clear that deceptive advertising campaign was a substantial cause of false efficacy belief because "the longer a brand has been in existence, the less its image stems from one particular advertising campaign," since "[f]or a brand like Bayer, which has been on the market for years, familiarity is the primary influence on brand image").

⁷ See R. Pitofsky, *Beyond Nader: Consumer Protection and the Regulation of Advertising*, 90 Harv. L. Rev. 661, 697 (1977) (hereinafter "Pitofsky, *Beyond Nader*") (false belief must continue to "influence purchasing decisions up to the date of the entry of a final Commission order, and [be] likely to continue to be influential for a substantial segment of potential purchasers even if the false claims [are] no longer disseminated by the seller").

⁸ Commission cease and desist orders, including their corrective advertising provisions, become final 60 days after service unless the Commission or a court has granted a stay. Section 5(g) of the FTC Act, 15 U.S.C. 45(g).

⁹ The corrective advertising provision could last substantially longer than one year because it is required to continue for "one year and at least until the respondent has expended on Doan's advertising a sum equal to the average amount spent annually during the eight years of the challenged campaign" (emphasis added). For instance, although the corrective advertising provision in *Warner-Lambert* was similarly prescribed to last until the respondent had spent the same amount on advertising as its average recent annual advertising expenditure, the provision was in effect for at least 18 months. *Mazis Tr.* at 1798.

superior efficacy belief would linger. ID at 63-64. According to the ALJ, the evidence revealed that it is uncertain¹⁰ that the false belief is likely to linger, given that the advertisements in *Warner-Lambert* ran for 51 years while the advertisements here ran for only 8 years. *Id.* at 64. The ALJ also found unpersuasive the testimony of Dr. Michael Mazis, complaint counsel's marketing expert, that the false superior efficacy belief would linger. *Id.* at 63. Finally, the ALJ not only rejected complaint counsel's argument that a lingering effect can be inferred from other facts, but also found "indications in the record that the belief in Doan's superiority may be transitory," *id.*, including evidence that the deceptive advertisements were not memorable and did not cause any increase in product sales. *Id.* at 64-65. A careful review of the evidence persuades me that the ALJ correctly concluded that the requisite lingering effect has not been proven.

1. Direct Evidence of Lingering Effect

The majority first relies on extrinsic evidence for its conclusion that the false superior efficacy belief will linger. In December 1996, National Family Opinion, Inc. ("NFO") conducted a mail panel research study of consumer beliefs (the "1996 NFO Study"). CX-421. The 1996 NFO Study tested the efficacy beliefs of users and aware non-users of six OTC analgesics -- Advil, Aleve, Bayer, Doan's, Motrin, and Tylenol. For each of these OTC analgesics, users and aware non-users were asked whether they strongly agreed, agreed, somewhat agreed, neither agreed nor disagreed, somewhat disagreed, disagreed, or strongly disagreed with the statement that the OTC analgesic was "more effective than other over-the-counter pain relievers for back pain." CX 421-V. For each of these six OTC analgesics, a significant proportion of the users and aware non-users had a false superior efficacy belief,¹¹ even though none of the OTC

¹⁰ The majority takes the ALJ to task for purportedly requiring that the lingering effect must be proven with certainty. Majority Op. at 21. The ALJ stated that "there is no certainty that the belief at issue requires corrective advertising." ID at 64. While the ALJ's language could have been more precise, the more reasonable understanding of his statement is that the evidence presented as to lingering effect was too uncertain, not that complaint counsel have not accomplished the obviously impossible task of proving lingering effect with certainty.

¹¹ Among users, 62.3% of Advil users, 51.4% of Aleve users, 41.3% of Bayer users, 78.9% of Doan's users, 61.4% of Motrin users, and 43.8% of Tylenol users stated that their own brand was superior for back pain relief. CX-421-V. Among aware non-users, 31.2% of Advil aware non-users, 19.9% of Aleve aware non-users, 27.1% of Bayer aware non-users, 44.6% of Doan's aware non-users, 35% of Motrin aware non-users, and 22.4% of Tylenol aware non-users stated that the brand that they were aware of (but did not use) was superior for back pain relief. *Id.*

analgesics other than Doan's had been advertised specifically as a back pain medication. Even though many users and aware non-users held the false superior efficacy belief for all of the OTC analgesics, Dr. Mazis testified that, following statistical adjustments, on average 20 to 25% more users and aware non-users of Doan's had a false superior efficacy belief than did the users and aware non-users of the other OTC analgesics tested. Mazis Tr. at 1385. Given a statistical confidence level of approximately 5%, Dr. Mazis testified that when a 20% reduction (*i.e.*, only a reduction of one in five of the relevant consumers) occurred, there would no longer be a lingering false superior efficacy belief to be corrected. *Id.* at 1385, 1386-87.

While the 1996 NFO Study shows that 20% more Doan's users and aware non-users have the false superior efficacy belief than the users and aware non-users of other OTC analgesics, it does not prove that this level of beliefs about Doan's is the lingering effect of the deceptive advertising. Study participants were simply never asked whether they had ever seen any Doan's advertising, much less the particular deceptive advertisements at issue here. Mazis Tr. at 1642, 1644, 1786. It is not impossible that study participants saw the deceptive advertising before it was discontinued in May 1996 and formed the false superior efficacy belief as a result of exposure to this advertising, and that this belief lingered until December 1996. However, a variety of influences -- other than any particular advertising campaign -- create, reinforce, and change consumer beliefs about a product. Given that other, entirely plausible influences could well be responsible for the belief reported in the 1996 NFO Study (such as historic positioning and the introduction of new extra strength Doan's products), I am not willing to infer that the belief is the enduring effect of the discontinued deceptive advertising. Jacoby Tr. at 3005-06; Scheffman Tr. at 2618.

Even if the 1996 NFO Study had established that the false superior efficacy belief had lingered, it would prove only that the belief had lingered until December 1996 -- not that it was likely to linger until July 2000 or beyond. Persuasive expert testimony is one possible method¹² of proving that the false superior efficacy belief

¹² Another possible method of proving lingering effect would be through a series of comparable consumer surveys conducted over the course of years demonstrating that the belief is durable. In *Warner-Lambert*, for example, the Commission concluded that a false cold and sore throat efficacy belief concerning Listerine would persist based on numerous, identical quarterly market research reports over an eight-year period demonstrating that consumers had consistent levels of the belief and that the belief did not diminish substantially during periodic cessations of the advertising during the summer

would continue to linger from December 1996 until July 2000 or beyond. Dr. Mazis, complaint counsel's expert, did testify that the heightened false superior efficacy belief is likely to linger, but his testimony on lingering effect is not persuasive. In support of his conclusion, Dr. Mazis briefly mentioned the length and effectiveness of the advertisements, the emphasis in the advertisements on the superior efficacy claim, and the results of copy tests. But he provided no analysis of the reasons that each of these factors demonstrates that a lingering effect is likely under the particular facts of this case. Mazis Tr. at 1255-56. In the absence of a thorough analysis as to why these considerations mean that the false superior efficacy belief is likely to linger, the unsupported conclusion of Dr. Mazis that the false belief will linger is no more persuasive than the conclusions of Novartis' experts that it will not. *See* Whitcup Tr. at 2336; Scheffman Tr. at 2536; Jacoby Tr. at 3201.¹³

Moreover, even assuming that Dr. Mazis had testified persuasively that the false superior efficacy belief generally is likely to linger, his testimony is flawed because it is extraordinarily indefinite as to how long the belief is likely to linger. Dr. Mazis variously phrased the length of the likely lingering effect as that it would "last for quite some time," it would "go on for years," it would "not go away quickly," it would linger for a "very, very long time," it would linger a "considerable length of time," and it would be "hard to know" how long it would linger, but "beliefs tend to dissipate slowly." Mazis Tr. at 1254, 1256, 1263, 1798, 1975. Dr. Mazis's testimony thus does

months. 86 FTC at 1472-76, 1503-04. Other than the 1996 NFO Study, the only other extrinsic evidence that purports to show the false superior efficacy belief is the 1993 Brand Equity Study. Like the ALJ, I do not believe that the 1993 Brand Equity Study is probative because the question posed was unclear as to whether participants were being asked if Doan's was very effective in an absolute sense or if Doan's was more effective than other OTC analgesics. FF 246. Consequently, unlike *Warner-Lambert*, there is no series of comparable tests over the course of years in this case that proves the existence of a stable and enduring false superior efficacy belief.

¹³ Dr. Mazis also relied on consumer research studies purportedly showing lingering false beliefs about Listerine mouthwash and Hawaiian Punch fruit drink in the 1970s. He provided no analysis of the reasons why the results of these studies are applicable to the specific facts of this case -- false superior efficacy beliefs about an OTC analgesic in the 1990s. Mazis Tr. at 1256-63. Consumers of OTC analgesics may well be subject to significantly different influences than consumers of mouthwash or fruit punch; for example, advertising for OTC analgesics is much more competitive than advertising for mouthwash or fruit punch. Scheffman Tr. at 2603-04, 2626, 2647. Consumers of products in the 1990s also may well be subject to significantly different influences than in the 1970s because of new media, such as cable television, electronic mail, and websites. Without a cogent analysis of why the results of these consumer research studies are applicable to current consumer beliefs about Doan's, I am not persuaded by Dr. Mazis's testimony that these studies prove lingering effect.

not address with any specificity how long the false superior efficacy belief is likely to linger.¹⁴

Dr. Mazis's expert testimony is far weaker than the expert testimony that has been offered in other Commission corrective advertising cases on the issue of how long the false belief will linger. For example, in *Warner-Lambert*, one marketing expert testified that the levels of false cold and sore throat efficacy beliefs for Listerine "would continue at the 1971 rate (59 percent) for about two years after colds advertising ceased and would remain high even *after* five years," while another marketing expert opined that "in the absence of colds advertising consumer beliefs would decline at *no greater* a rate than 5 percent a year." 86 FTC at 1503-04 (emphasis in original). Similarly, in *American Home Products*, experts testified that after deceptive advertising making a false superior efficacy claim about Anacin ceased, the false belief created would linger among non-users for "approximately one year" and among users for more than one year. 98 FTC at 283-84.

Some quantitative assessment is needed in this case if expert testimony is going to support the imposition of corrective advertising. After all, because the deceptive advertising here ceased three years ago, corrective advertising cannot be ordered as a matter of law if the false superior efficacy belief is likely to linger for three years or less, while it could be ordered if the belief is likely to linger for approximately four years or more. Expert testimony that the false superior efficacy belief is likely to linger for some indeterminate period of time is of little probative value when the Commission must decide whether the belief is likely to linger for a particular period of time. Given Dr. Mazis's lack of analysis in support of his opinion that the false belief is likely to linger and his inability to identify with any specificity how long the false belief will linger, I conclude, like the ALJ, that his testimony is not persuasive.

2. Inference of Lingering Effect

Absent a basis in the direct evidence, the majority turns to inference as an additional ground for its conclusion that the

¹⁴ As an example of how indefinite are Dr. Mazis's testimony and the other evidence on the issue of the duration of the false superior efficacy belief, one need look no further than the disagreement between the majority and complaint counsel over the suitable length of the corrective advertising remedy: the majority has concluded that the evidence warrants a one-year period for corrective advertising, while complaint counsel have argued that (if a fixed period is imposed) the evidence warrants an eight-year period for corrective advertising. CCRB at 40 n. 55.

heightened level of false superior efficacy beliefs among Doan's users and aware non-users will linger. Majority Op. at 30-31. The majority infers a lingering effect from the fact that the deceptive superior efficacy claim was very salient to consumers. *Id.* at 30. The majority also draws such an inference from the fact that the deceptive superior efficacy claim was clearly and consistently conveyed to consumers, as revealed by copy tests. *Id.* at 30-31. Finally, the majority infers lingering effect from the fact that the deceptive advertising campaign was an integral part of an eight-year advertising campaign that cost \$65 million. *Id.* at 30.

The Commission has said that inferences drawn from other facts may be used to prove the requisite lingering effect in some circumstances. "[A]bsent probative evidence one way or the other, [the Commission may] infer that a deceptive advertisement will leave a lingering deceptive impression in consumers' minds." *American Home Products Corp.*, 98 FTC at 408 n.93; see *Bristol-Myers*, 102 FTC at 380 n.102 ("survey evidence is only one factor to be considered in determining whether corrective advertising is appropriate in a particular case"); *Statement in Regard to Corrective Advertising*, 6 Trade Reg. Rep. (CCH) ¶ 39,046 at 41,705 (1979) ("In some cases, the [Commission] might conclude that corrective advertising is necessary without formal surveys to show that consumers have lasting wrong impressions about the product."). While an inference from other facts may be employed in appropriate cases, such an inference generally will have less probative value than direct evidence because inference is by nature an indirect and imprecise method of proof.¹⁵ Indeed, it is important to emphasize that the only time that the Commission has ordered corrective advertising in an adjudicated case in more than two decades, it relied on direct evidence in the form of persuasive extrinsic evidence and expert testimony, not simply on inferences. *Warner-Lambert*, 86 FTC at 1501-04.

¹⁵ It is extremely difficult to infer any particular duration of a lingering effect from other facts. For example, in this case, what are the differences in length of lingering effect among a material claim, a salient claim, and a very salient claim? What are the differences in length of lingering effect for an implied claim, a nearly express claim, a clear and consistent claim, and an express claim? What are the differences in length of lingering effect among a ten-year, \$45 million advertising campaign; an eight-year, \$65 million advertising campaign; and a five-year, \$75 million advertising campaign? The indeterminate duration of any inferred lingering effect indicates that the case in which inference will support corrective advertising is likely to be the exception, not the rule.

While inference of lingering effect may be considered in this case, the particular inferences that the majority seeks to draw are not persuasive. The majority first infers a lingering effect from the purported powerful impact of the deceptive advertising on consumers, which, in turn, is based on the majority's conclusions that the superior efficacy claim was "very salient" and was made "clearly and consistently." Consumers may have taken away the implied claim immediately after seeing the deceptive advertisements, but only a minimal proportion (between 1% and 8%) of test participants recalled the claim 24 hours or 72 hours after viewing the advertisements along with programming and other advertisements.¹⁶ Similarly, only a minimal proportion (0% top-of-the-mind and 2% total unaided) of consumers recalled any advertising for Doan's, including the deceptive advertisements. RX 2-O. Although consumers could conceivably form a belief about a product based on a deceptive advertisement without being able to recall the claim shortly thereafter or without being able to recall any advertising for the product, the far more plausible conclusion is that the extremely low recall of the deceptive claim and of Doan's advertising means that the deceptive advertisements had no real lasting impact because they were not memorable. Whitcup Tr. at 2123. Indeed, the conclusion that the deceptive advertisements did not have a powerful impact on consumer beliefs is corroborated by the fact that unit sales of Doan's declined during 1988 to 1993, the first five years in which the deceptive advertisements were being disseminated. RX-189-A; Scheffman Tr. at 2550-51; Stewart Tr. at 3487. I am not persuaded that an inference can be drawn that this ineffective advertising campaign caused a false belief that is likely to linger until July 2000 or beyond, more than four years after Novartis ceased disseminating the deceptive advertisements.

The majority, emphasizing that the campaign lasted eight years, cost \$65 million, and reached 80 to 90% of the target audience 20 to 27 times per year, also would infer a lingering effect from the purported extensiveness of the advertising campaign. Majority Op. at 30-31. But reaching 80 to 90% of one's target audience 20 to 27 times per year pales in comparison to the level of advertising by Novartis's

¹⁶ FF 141, 148, 153, 157, 164. While these studies may understate the level of advertising claim communication because they are designed primarily to test the memorability of advertisements, not claims in advertisements, *see Kraft, Inc.*, 114 FTC at 126 n.13, they nevertheless raise serious doubt as to whether the deceptive advertisements had the claimed powerful impact on consumer beliefs.

competitors, who reach 98 to 99% of their target audience between 32.5 and 121.2 times per year. JX 2-H, ¶ 32; RX 36-M, Z-27. Moreover, Novartis was primarily using short television advertisements (15 seconds in duration), while its competitors generally were using much longer advertisements (30 seconds and 45 seconds in duration). IDF 318; Peabody Tr. at 465. Given that Novartis competes with other OTC analgesic advertisers for the limited attention of OTC analgesic customers, I am not persuaded that the relatively infrequent and short advertisements here captured the limited attention that consumers devote to considering information about OTC analgesics so as to have caused strong beliefs that are likely to linger for years.¹⁷

A comparison to prior Commission cases in which corrective advertising has been considered and rejected also persuades me that a lingering effect cannot be inferred from the fact that Novartis clearly and consistently made a very salient superior efficacy claim for Doan's during an eight-year, \$65 million advertising campaign. The deceptive advertising campaign here pales in comparison with other deceptive advertising campaigns (especially when advertising expenditures are measured in constant dollars) that have not resulted in the Commission imposing corrective advertising. See Appendix A.¹⁸ For example, in *American Home Products*, the respondent had made, expressly and by clear implication, a false superior efficacy claim for Anacin during a more than 12-year, \$204 million advertising campaign. 98 FTC at 151. The Commission did not order a statement to correct any resulting false superior efficacy establishment belief because there was "little likelihood that a false or unsubstantiated image of proven superiority [would] survive" in

¹⁷ In determining whether the deceptive advertisements were so extensive that an inference of lingering false belief can be drawn, the majority rejects any consideration of the extent of advertising by other competitors in the marketplace. Majority Op. at 31. However, in assessing the effects of a deceptive advertising campaign, the Commission should not treat deceptive advertising, especially comparative deceptive advertising, as if it takes place in a vacuum. For instance, assume that Company A spent \$20 million over five years on advertisements making the deceptive claim that Product A is better than Product B, while Company B spent \$500 million over the same five years on advertisements making the claim that Product B is better than Product A. In determining if it can be inferred that Company A's campaign is likely to create the lingering false belief that Product A is superior, the Commission should consider the nature and extent of the advertising campaigns of both Company A and Company B.

¹⁸ The majority states that I am emphasizing "the duration of the advertising campaign and the dollars spent in these cases." Majority Op. at 32 n.44. I have addressed the length of deceptive advertising campaigns and the amounts spent during these campaigns simply because they are some of the facts from which the majority is drawing an inference of lingering effect.

light of the traditional relief contained in the Commission's cease-and-desist order. *Id.* at 411.

Similarly, in *Bristol-Myers*, the respondent had made, expressly and by clear implication, false superior efficacy claims for Bufferin and Excedrin that were important to consumers. These claims were made during a 13-year, \$171 million advertising campaign for Bufferin, and a 13-year, \$98 million advertising campaign for Excedrin. 102 FTC at 21, 104-06, 254, 260. The Commission did not order a statement to correct any resulting false superior efficacy establishment claims for either Bufferin or Excedrin. The Commission concluded that such a remedy was not warranted because there was "no evidence that consumers will retain an image that this superiority has been established," *id.* at 380, and in the absence of such evidence the Commission was unwilling to infer the existence of such an enduring image from the superior efficacy belief held and the extent and nature of the deceptive advertising campaign. *Id.* at 380 n.102. Accordingly, *Bristol-Myers* and *American Home Products*¹⁹ provide no support for the inference that the majority draws in this case.

In contrast, it might be instructive to consider a recent case in which I drew an inference of lingering effect. *R.J. Reynolds Tobacco Co.*, FTC File No. 992-3025 (Mar. 1, 1999). In August 1997, R.J. Reynolds ("Reynolds") commenced a massive²⁰ national advertising campaign running innovative print, billboard, and point-of-sale advertisements for Winston cigarettes that made an express "No Additives" representation. The advertising campaign was so successful that by the end of 1997, Reynolds had already increased its volume of Winston sales by 9%. *1997 RJR Nabisco Annual Report* 24 (1997). In March 1999, when the advertising campaign was ongoing, the Commission accepted for public comment a consent

¹⁹ In *Sterling Drug*, the Commission did not order corrective advertising because "it ha[d] not been shown that [the deceptive] advertising created or reinforced the public's image of Bayer," 102 FTC at 799, and, therefore, the Commission did not reach the issue of lingering effect.

²⁰ *1997 Annual Report: R.J. Reynolds Tobacco Co.* (1997) ("Winston's comprehensive marketing program includes eye-catching billboards and print ads that speak straight to adults with a twist of humor. Point-of-sale displays cut through the marketplace clutter, and new packaging - with distinctive wraparound graphics - reflects the "No Bull" attitude."); American Lung Association, *American Lung Association News*, "Winston Campaign Attacked by Health Groups" (Aug. 25, 1997) (R.J. Reynolds launched a "massive national advertising campaign to reposition Winston. Ads * * * appeared in such widely circulated publications as People, Glamour, and Inside Sports magazines. Billboards, bus shelters, and other outdoor advertising proclaim Winston as the new cigarette with nothing but tobacco.").

agreement with Reynolds accompanied by a complaint alleging that the "No Additives" representation made the implied claim that Winston cigarettes are safer to smoke because they contain no additives. The proposed order would require that Reynolds make a corrective statement in its advertising for one year. I was willing to infer that the false belief would linger in the minds of consumers for one year "[b]ased on the extent and magnitude of the ongoing ad campaign and the demonstrated strength of the implied health claim." Inferring a one-year lingering effect from the ongoing, massive, and innovative advertising campaign in *R.J. Reynolds* for purposes of accepting a consent agreement for public comment, however, is a far cry from the present case, in which a more than four-year lingering effect is being inferred from a long-discontinued, limited, and uncreative advertising campaign.²¹

In my view, complaint counsel have not met their burden of proving that the false superior efficacy belief concerning Doan's is likely to linger. The direct evidence in the record on the issue of lingering effect -- the 1996 NFO Study and Dr. Mazis's testimony -- is far weaker than the direct evidence of lingering effect that justified corrective advertising in *Warner-Lambert*, and it does not persuade me that the false superior efficacy belief is likely to linger. The inference as to lingering effect that the majority seeks to draw is not persuasive, and the Commission did not draw such an inference from even stronger facts in *American Home Products* and *Bristol-Myers*. Complaint counsel's failure to meet their burden of proof on the issue of lingering effect should not be surprising, given how rarely complaint counsel will be able to prove this effect. See R. Pitofsky, *Beyond Nader*, 90 Harv. L. Rev. at 697 (if the burden of proving lingering effect remains with complaint counsel -- so that complaint counsel is not simply entitled to a presumption on this issue -- then corrective advertising will be "imposed rarely"). Without stronger evidence of lingering effect, the Commission cannot order corrective advertising.

²¹ Resort to inference is more likely in the context of consent agreements than in adjudicated cases. Extrinsic evidence and expert testimony often are not available to the Commission when it considers a consent agreement, which makes the use of inference more probable. See *Eggland's Best*, 118 FTC 340, 365 n.3 (1994) (Statement of Commissioner Roscoe B. Starek, III, concurring) ("It is certainly unrealistic to think that we will have [extrinsic evidence of lingering effect] when the respondents enter into a consent agreement before a complaint is filed."). Moreover, because the Commission applies a "reason to believe" standard to consent agreements and a "preponderance of the evidence" standard to adjudicated cases, inference is more likely to suffice in connection with consent agreements than adjudicated cases.

III. CONSTITUTIONALITY OF CORRECTIVE ADVERTISING REQUIREMENT

I also believe that the corrective advertising provision is a form of compelled speech that infringes Novartis's constitutional right to engage in commercial speech. The Supreme Court has recognized that advertising is a form of commercial speech entitled to protection under the First Amendment to the United States Constitution. The free flow of commercial information through advertising is "indispensable to the proper allocation of resources in a free enterprise system" because it informs the numerous private decisions that drive the system. *Virginia State Bd. of Pharmacy v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748, 765 (1976). Advertising is critical to consumers because a "particular consumer's interest in the free flow of commercial information ... may be as keen, if not keener by far, than his interest in the day's most urgent political debate." *Id.* at 763. Corrective advertising requirements disrupt the free flow of information from advertisers to consumers because they compel advertisers to make statements that they would not otherwise make, sometimes having adverse incidental consequences for those advertisers. See *Sterling Drug, Inc.*, 102 FTC at 723 (Initial Decision); see also R. Pitofsky, *Beyond Nader*, 90 Harv. L. Rev. at 698 ("The purchase of advertising space or time for the corrective message is expensive, and the remedy is unusually embarrassing to the false advertiser."); Note, *Corrective Advertising -- The New Response to Consumer Deception*, 72 Colum. L. Rev. 415, 429, 431 (1972) (remedy is "severe" and "dramatic").

Notwithstanding the fact that corrective advertising remedies disrupt the free flow of information from advertisers to consumers and may otherwise harm advertisers, the burdens associated with such compelled speech pass constitutional muster if they meet the test first enunciated in *Central Hudson Gas & Electric Corp. v. Public Serv. Comm. of N.Y.*, 447 U.S. 557 (1980). *Central Hudson* set out a framework for determining whether a regulation of commercial speech (or compelled speech in the commercial speech context²²) survives First Amendment scrutiny:

²² The corrective advertising remedy mandates that Novartis make a statement that it finds objectionable in part because its competitors in the highly competitive OTC analgesic market do not have to make such statements. Therefore, the corrective advertising remedy here is a form of compelled speech that is to be analyzed under the *Central Hudson* test. See *Glickman v. Wileman Bros. & Elliott, Inc.*, 117 S. Ct. 2130, 2139 (1997) (*Central Hudson* test applies to compelled commercial speech that requires advertisers to "repeat an objectional [sic] message out of their own mouths").

For commercial speech to come within [the First Amendment], it at least must concern lawful activity and not be misleading. Next, we ask whether the asserted governmental interest is substantial. If both inquiries yield positive answers, we must determine whether the regulation directly advances the governmental interest asserted, and whether it is not more extensive than is necessary to serve that interest.

447 U.S. at 566.

I agree with my colleagues that the initial portions of the *Central Hudson* test have been satisfied, see *Warner-Lambert*, 562 F. 2d at 771 (corrective advertising is intended to serve the substantial governmental interest of protecting citizens against deception), but I disagree that the corrective advertising provision here "directly advances the governmental interest asserted" and is "not more extensive than is necessary to serve that interest."

A. Direct Advancement of Substantial Governmental Interest

Central Hudson requires that the restriction on commercial speech "directly advance [] the governmental interest asserted." 477 U.S. at 566.²³ This "is not satisfied by mere speculation or conjecture; rather [the government] must demonstrate that the harms it recites are real and that its restrictions will in fact alleviate them to a material degree." *Edenfield*, 507 U.S. at 770-71; see also *44 Liquormart, Inc. v. Rhode Island*, 116 S. Ct. 1495, 1509 (1996) ("some impact" in redressing harm is not enough; ban on alcohol price advertising must "significantly reduce alcohol consumption") (emphasis in original). A restriction thus will not be sustained if "it provides only ineffective or remote support for the government's purpose." *Edenfield*, 507 U.S. at 770, quoting *Central Hudson*, 447 U.S. at 564; see also *City of Cincinnati v. Discovery Network, Inc.*, 507 U.S. 410 (1993).

Corrective advertising is intended to prevent deception by curing the lingering false beliefs of consumers that were caused by deceptive advertising. The record before us does not demonstrate that the false superior efficacy belief here is likely to linger through the time that the corrective advertising provision will be in effect. As explained above, the only evidence that a heightened level of false superior efficacy beliefs is likely to linger until July 2000 or beyond is the

²³ The government has the burden of proving that a corrective advertising requirement meets the *Central Hudson* standard because "[i]t is well-established that '[t]he party seeking to uphold a restriction on commercial speech carries the burden of justifying it.'" *Edenfield v. Fane*, 507 U.S. 761, 770 (1993), quoting *Bolger v. Youngs Drug Products Corp.*, 463 U.S. 60, 71 n. 20 (1983); see also *Ibanez v. Fla. Dept. of Bus. & Pro. Regulation*, 512 U.S. 136, 142 n.7 (1994).

inconclusive 1996 NFO Study, the unsupported and indefinite testimony of Dr. Mazis, and the unwarranted broad inferences that the majority draws. This weak evidence of lingering effect does not satisfy the Commission's burden of showing direct advancement of a substantial governmental interest, because a corrective advertising provision cannot prevent deception arising from false superior efficacy beliefs in the absence of proof that such lingering beliefs are likely to exist. See *Rubin v. Coors Brewing Co.*, 514 U.S. 476, 490 (1995) ("anecdotal evidence" and "educated guesses" are not sufficient); *Edenfield*, 507 U.S. at 771 (conclusory testimony is not sufficient).²⁴

B. No More Extensive Than Necessary

The corrective advertising requirement also violates the last prong of *Central Hudson*, 477 U.S. at 566, which requires that the governmental restriction be no more extensive than necessary to serve the asserted governmental interest. See also *Warner-Lambert*, 562 F.2d at 758 (Commission has a "special responsibility to . . . order corrective advertising only if the restriction inherent in its order is no greater than necessary to serve the interest involved"). This means that there must be a "reasonable fit" between the restriction imposed and the government interest sought to be advanced. *Board of Trustees of the State Univ. of N.Y. v. Fox*, 492 U.S. 469, 480 (1989). "[I]f there are numerous and obvious less-burdensome alternatives to the restriction on commercial speech, that is certainly a relevant consideration in determining whether the 'fit' between ends and means is reasonable." *City of Cincinnati*, 507 U.S. at 417 n.13; see also *Rubin*, 514 U.S. at 490-91 (no reasonable fit between restriction and governmental interest existed because less restrictive options were available). In analyzing the fit between the restriction and the governmental interest, the government must carefully calculate the costs and benefits associated with the restriction. *City of Cincinnati*, 507 U.S. at 417-18; *Fox*, 492 U.S. at 480.

The majority addresses in one short paragraph whether the corrective advertising provision here is a reasonable fit with the

²⁴ Similarly, it is unclear that the corrective advertising provision will in fact correct any remaining false superior efficacy beliefs (and thereby prevent deception) to any material degree in the approximately one year that it will be in effect. While testifying that the remedy will correct beliefs much more quickly than if it were not imposed, Dr. Mazis also acknowledged that "[w]e don't know how much faster" and no one "can measure with any precision how long a corrective notice for this particular case should be run." Mazis Tr. at 1975, 1382.

asserted governmental interest in preventing deception. The paragraph states that the Commission has balanced the need for correcting lingering false beliefs against Novartis's ability to broadcast effectively, the upshot of which is to exempt short television and radio advertisements from the corrective advertising requirement. Majority Op. at 37. Thus, except for not applying the corrective advertising requirement to short television and radio advertisements, the majority does not consider any less restrictive alternatives. This minimal analysis is not the careful calculation of the costs and benefits associated with alternatives that *Central Hudson* requires.

First, the majority does not analyze whether there are any narrower alternatives to imposing corrective advertising, including considering whether traditional cease-and-desist order provisions (such as those contained in Parts I and II of the Order, or triggered disclosure requirements) could be adequate to address future deception.²⁵ Second, assuming that some corrective advertising provision is warranted, the majority does not address in any detail whether there are narrower alternatives to this particular corrective advertising provision. The corrective advertising requirement in this case apparently is intended to closely track the requirement imposed in *Warner-Lambert*. The respondent in *Warner-Lambert* was required to make a corrective statement in all advertising until it had "expended on Listerine advertising a sum equal to the average annual Listerine advertising budget for the period of April 1962 to March 1972." 86 FTC at 1515.²⁶ Here, Novartis is required to make a corrective statement in all of its "advertising" (except short television and radio advertisements) for "one year and until the respondents have expended on Doan's advertising a sum equal to the average amount spent annually during the eight years of the challenged campaign." The Order defines an "advertisement" broadly to include any intended inducement to sale that appears in:

²⁵ In other cases, the Commission analyzed whether other cease-and-desist provisions would substantially prevent deception before concluding that corrective advertising was the "least restrictive means of achieving a substantial and important governmental objective." *Warner-Lambert*, 562 F. 2d at 770-71; see also *American Home Products Corp.*, 98 FTC at 411 (corrective advertising was not needed in part because a triggered efficacy disclosure would be sufficient to prevent deception).

²⁶ When it issued its decision in 1975, the Commission concluded that the false belief about Listerine would linger "well into the 1980's," 86 FTC at 1504, that is, at least five years after the Commission's order became final. The Commission imposed an approximately one-year corrective advertising requirement to address this lingering effect. This demonstrates an effort to carefully craft a remedy that was not overbroad.

a brochure, newspaper, magazine, free standing insert, marketing kit, leaflet, circular, mailer, book insert, letter, catalog, poster, chart, billboard, public transit card, point-of-purchase display, package insert, package label, product instructions, electronic mail, website, homepage, film, slide, radio, television, cable television, program-length commercial or infomercial, or in any other medium.

Part IV thus imposes a corrective advertising requirement that is nearly identical to the one-year, all-media requirement that the Commission imposed in *Warner-Lambert*.

While applying the corrective requirement to all media may have been a reasonable fit with the objective of correcting false beliefs in *Warner-Lambert*, it is not a reasonable fit in this case. In *Warner-Lambert*, the Commission was trying to correct false beliefs among the *general public* concerning Listerine mouthwash, and so an all-media corrective advertising provision was consistent with that objective. See *Warner-Lambert*, 86 FTC at 1501, 1503 (false beliefs exist among "Listerine users as well as nonusers"; "long after Listerine cold efficacy advertising ceased, a substantial portion of the *public* would continue to believe") (emphasis added). In contrast, the Commission here is trying to correct false superior efficacy beliefs among *Doan's users and aware non-users*. Mazis Tr. at 1385, 1805 (back pain sufferers who are neither Doan's users nor aware non-users have no need to receive the corrective statement). Therefore, the media chosen for the dissemination of the corrective message here must be targeted to Doan's users and aware non-users if the Commission's remedy is to achieve the reasonable fit that is constitutionally required. See *44 Liquormart, Inc.*, 517 U.S. 484, 529 (1996) (O'Connor, J., concurring in judgment) ("The scope of the restriction on speech must be *reasonably*, though it need not be perfectly, *targeted* to address the harm intended to be regulated.") (emphasis added). Significantly, the difference between the general public as a target audience and Doan's users and aware non-users as a target audience is quite substantial, given that 31% of back pain sufferers (itself a subset of the general public) are neither Doan's users nor aware non-users. Mazis Tr. at 1793.

The corrective advertising requirement here is in no way limited to media that are likely to target Doan's users and aware non-users. One narrower alternative that would more accurately target Doan's users and aware non-users is to require the corrective statement only on product labeling and in packaging. Product labeling and packaging are sources of critical safety and efficacy information for users and

potential users of Doan's, such as indications for use, directions, warnings, drug interactions, active ingredients, and inactive ingredients. *See Mazis Tr.* at 1607-08 (product package can affect beliefs; consumers look at the product package immediately at the point of purchase). Another narrower alternative is brochures with corrective information that would be made available to Doan's users and aware non-users through prominent displays on the drug store shelves and other locations at which Doan's and other OTC analgesics are sold. Indeed, the Commission has used similar media to target a particular group of consumers who have false beliefs to be corrected.²⁷ Although dissemination of a corrective statement through product packaging and point-of-sale displays, either separately or combined, is a less restrictive alternative that may well be adequate to correct the false belief among Doan's users and aware non-users, the majority does not consider the imposition of such alternatives -- much less conduct a careful calculation of their costs and benefits. Therefore, the corrective advertising requirement imposed here has not been demonstrated to be no more extensive than necessary, as *Central Hudson* requires.

IV. CONCLUSION

Because the evidence in the record does not prove that the false superior efficacy belief will linger for the requisite period of time for imposing corrective advertising under the standard set forth in *Warner-Lambert*, and also because the corrective advertising provision is an unconstitutional infringement on Novartis's right to engage in commercial speech under the First Amendment, I dissent from Part IV of the Order.

²⁷ *See, e.g., Egglund's Best*, 118 FTC at 366 (Statement of Commissioner Roscoe B. Starek, III, concurring) (corrective statement on egg cartons was "careful[ly] craft[ed]" to "reach consumers likely to have been misled by Egglund's ads (those who are preparing to purchase the product), rather than the population at large"); *Unocal Corp.*, 117 FTC 500, 511 (1994) (corrective brochure required to be mailed to customers who had company credit cards and who lived in one of five specified states in which deceptive claims were disseminated).

APPENDIX A

APPENDIX A

Case	Product	Type of Claim	Type of Belief	Time of Ad Campaign	Length of Ad Campaign	Current Dollars Spent	Constant Dollars Spent (May 1992)*	Corrective Advertising Imposed
<u>Warner-Lambert</u> (1975)	Listerine	Express and Clearly Implied Efficacy Claim	Cold and Sore Throat Efficacy	1921-1973	51 Years	"Vast Sums"	Not Available	Approx. 1 Year
<u>American Home Products</u> (1981)	Anacin	Express and Clearly Implied Superior Efficacy Claim	Superior Efficacy Establishment Claim	1965-1977	12 Years	\$204 Million	\$716 Million (est.)	None
<u>Bristol Myers</u> (1983)	Bufferin	Express and Clearly Implied Superior Efficacy Claim	Superior Efficacy Establishment Claim	1960-1973	13 Years	\$171 Million	\$600 Million (est.)	None
	Excedrin	Express and Clearly Implied Superior Efficacy Claim	Superior Efficacy Establishment Claim	1960-1973	13 Years	\$98 Million	\$344 Million (est.)	None
<u>Sterling</u> (1983)	Bayer	Clear and Unequivocal Superior Efficacy Claim	Superior Efficacy Claim	1969-1973	5 Years	\$86 Million	\$365 Million (est.)	None
<u>Novartis</u> (1999)	Doan's	Clearly Implied Superior Efficacy Claim	Superior Efficacy Claim	1988-1996	8 Years	\$65 Million	\$65 Million	Approx. 1 Year

* I have assumed that each advertising campaign spent the entire amount at the midpoint of the campaign (*Bristol Myers*, January 1967; *American Home Products*, January 1971; *Sterling*, January 1971). Because May 1992 is the midpoint of the deceptive advertising campaign at issue in this case, I have used the United States Department of Labor's Consumer Product Index to convert the current dollars spent at the midpoint in each of these campaigns to May 1992 dollars.

IN THE MATTER OF
MONIER LIFETILE LLC, ET AL.

CONSENT ORDER, ETC., IN REGARD TO ALLEGED VIOLATION OF
SEC. 7 OF THE CLAYTON ACT AND SEC. 5 OF THE
FEDERAL TRADE COMMISSION ACT

Docket 9290. Complaint, Sept. 22, 1998--Decision, May 19, 1999

This consent order, among other things, requires the respondents, producers of concrete roofing tile, who have established a joint venture, to divest certain tile manufacturing assets and to provide written notification to the Commission prior to acquiring any stock, share capital or equity in any concern engaged in the manufacturing of concrete roofing tile in Southern California, Arizona, Nevada or Florida.

Participants

For the Commission: *Nicholas Koberstein, Alissa Hecht, Ann Malester, Eric Rohlck, Daniel Ducore, William Baer, Charissa Wellford, William Layher, Charles Pidano, and Randi Boorstein.*

For the respondents: *Tom Smith, Jones, Day, Reavis & Pogue, Washington, D.C. and Randall Allen, Alston & Bird, Atlanta, GA.*

COMPLAINT

The Federal Trade Commission ("Commission"), having reason to believe that Boral Ltd., a corporation subject to the jurisdiction of the Commission, and Redland PLC, a wholly-owned subsidiary of Lafarge S.A., a corporation subject to the jurisdiction of the Commission, acquired shares in and contributed assets to a joint venture limited liability corporation, Monier Lifetile LLC, a corporation subject to the jurisdiction of the Commission, in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. 18, and Section 5 of the FTC Act, as amended, 15 U.S.C. 45; and it appearing to the Commission that a proceeding in respect thereof would be in the public interest, hereby issues its complaint, stating its charges as follows:

I. RESPONDENTS

1. Respondent Monier Lifetile LLC is a corporation organized, existing, and doing business under and by virtue of the laws of the state of Delaware, with its principal place of business located at One