

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 343

[Docket No. 77N-094A]

RIN 0910-AA01

Internal Analgesic, Antipyretic, and Antirheumatic Drug Products for Over-the-Counter Human Use; Proposed Amendment to the Tentative Final Monograph

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Food and Drug Administration (FDA) is proposing to amend the tentative final monograph for over-the-counter (OTC) internal analgesic, antipyretic, and antirheumatic drug products to include the use of aspirin, buffered aspirin, and aspirin in combination with antacid to reduce the risk of vascular mortality in people with a suspected acute myocardial infarction (MI). This proposal is in response to two citizen petitions and is part of the ongoing review of OTC drug products conducted by FDA.

DATES: Submit written comments by September 11, 1996. Written comments on the agency's economic impact determination by September 11, 1996. The agency is proposing that any final rule that may issue based on this proposal be effective 12 months after the date of its publication in the *Federal Register*.

ADDRESSES: Written comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, 12420 Parklawn Dr., rm. 1-23, Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: William E. Gilbertson, Center for Drug Evaluation and Research (HFD-105), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-827-2304.

SUPPLEMENTARY INFORMATION:

I. Introduction

In the *Federal Register* of November 16, 1988 (53 FR 46204), the agency published a tentative final monograph (TFM) to establish conditions under which OTC internal analgesic, antipyretic, and antirheumatic drug products are generally recognized as safe and effective and not misbranded (hereinafter referred to as the 1988 TFM). The 1988 TFM included professional labeling for drug products

containing aspirin, buffered aspirin, and aspirin in combination with an antacid for certain cardiovascular and cerebrovascular uses to: (1) Reduce the risk of death and/or nonfatal MI in patients with a previous infarction or unstable angina pectoris, and (2) reduce the risk of recurrent transient ischemic attacks (TIA's) or stroke in men who have had transient ischemia of the brain due to fibrin platelet emboli.

The agency has received two citizen petitions (Refs. 1 and 2), submitted in accord with § 10.30 (21 CFR 10.30), requesting that the professional labeling section of the monograph for OTC internal analgesic, antipyretic, and antirheumatic drug products be amended to include an indication for the use of aspirin in treating acute MI. One petition included reports of four studies to support this indication. The petitions are on public display in the Dockets Management Branch (address above).

FDA has reviewed the information in the petitions and finds that it supports the safety and effectiveness of aspirin, buffered aspirin, or aspirin in combination with antacid to reduce the risk of vascular mortality in patients with a suspected acute MI. Therefore, the agency is proposing to amend the professional labeling in § 343.80 of the 1988 TFM for OTC internal analgesic drug products to include information on aspirin, buffered aspirin, or aspirin in combination with antacid for this indication. Final agency action on this proposal will occur in a future issue of the *Federal Register*.

II. The Citizen Petitions

A. The Agency's Evaluation of the Citizen Petitions

One citizen petition (Ref. 1) included reports of four clinical trials conducted to evaluate the safety and effectiveness of aspirin in treating acute MI (Refs. 3 through 6). The petition cited the results of the Second International Study of Infarct Survival (ISIS-2) (Ref. 3) as primary support for the safety and effectiveness of aspirin in the treatment of acute MI to reduce the risk of fatal and nonfatal cardiovascular and cerebrovascular events.

The ISIS-2 study was undertaken after a pilot study (Ref. 7) of 619 subjects suggested that aspirin was effective in reducing the incidence of nonfatal reinfarction, death, and stroke in subjects with suspected acute MI. The ISIS-2 study was a 2 x 2 factorial study of 17,187 subjects (both men and women) with suspected acute MI, randomized so that 8,592 subjects received a single dose of streptokinase

(1.5 million units (MU)) and 8,595 received an intravenous placebo (hepatitis-B-antigen-free albumin). Streptokinase or placebo was intravenously infused over about 1 hour in 50 to 200 milliliters of physiological saline. Of the subjects, 8,587 were also allocated randomly to receive oral aspirin (162.5 milligrams (mg), enteric-coated) daily for 1 month (the first dose crushed, sucked, or chewed), and 8,600 received oral placebo (enteric-coated starch tablets). Thus, within 24 hours of the onset of symptoms, 4,300 subjects received streptokinase plus oral placebo, 4,295 received aspirin plus placebo infusion, 4,292 received both active treatments, and 4,300 received double placebo. Subjects in whom acute MI was suspected but not confirmed were eligible for the study if they were entered within 24 hours of the onset of symptoms and had no clear indication for, or contraindication to, streptokinase or aspirin. Subjects from 417 hospitals in 16 countries were included in the study. Information collected and recorded prior to randomization included patient identifiers, age, systolic blood pressure, hours from onset of pain, aspirin use in the week prior to admission, and details concerning the planned treatment. Ancillary treatment (including treatment with aspirin) was not restricted. Electrocardiogram (ECG) results were not used as a basis for randomization. Once enrolled, subjects remained in the assigned treatment group for an intent-to-treat analysis of results.

An ECG done prerandomization was submitted along with information on compliance with the study treatment, other drug use, and adverse events. Observers blind to the treatment assignment read the ECG's and reviewed the deaths. Causes of death were categorized as "vascular" or "nonvascular." The protocol defined vascular deaths as those attributed to cardiac, cerebral, hemorrhagic, other vascular, or unknown causes. Further details of reports of stroke were collected for blinded review by a neurologist.

Three primary analyses were conducted to assess the following effects: (1) Streptokinase on vascular mortality during the first 35 days, (2) streptokinase on vascular mortality during the entire study period (a median followup of 15 months), and (3) oral daily aspirin on vascular mortality during the first 35 days. The effects of allocated treatment on clinical events (reinfarction, cardiac rupture, cardiac arrest, bleeding, and stroke) and on nonvascular mortality were also

evaluated. Although not specified in the protocol, subgroup analysis on vascular mortality in days 0 to 35 was performed for certain parameters, such as age, gender, diabetes, and systolic blood pressure.

Results were presented as absolute changes and as changes in the odds of death. The report states: " * * * a change from 10 percent dead (odds 10/90) to 8 percent dead (odds 8/92) involves an odds ratio of 8/92 divided by 10/90, or 0.78, and is therefore described as a 22 percent reduction in the odds of death (rather than as a 20 percent reduction in the risk of death)." (A change from 10 percent dead (risk 10/100) to 8 percent dead (risk 8/100) would represent a 20 percent reduction in risk of death.)

During the first 35 days, there were 804 (9.4 percent) vascular deaths in the

8,587 subjects randomized to receive oral aspirin, and 1,016 (11.8 percent) vascular deaths in the 8,600 subjects randomized to placebo. These results represent an absolute reduction of 2.4 percent in the mean 35-day vascular mortality attributable to aspirin and a highly significant (23 percent) reduction in the odds of vascular death ($2p < 0.00001$, confidence interval 15 to 30 percent). Although not an endpoint specified in the protocol, an effect of aspirin was still present after the median 15-month followup was completed, with a total reduction of early and late vascular mortality of 1.9 percent, highly significant ($2p < 0.001$).

The number of nonvascular deaths in subjects allocated to receive aspirin was not significantly different from subjects receiving placebo for the 15-month

median followup. One nonvascular death occurred before 5 weeks, and 24 deaths occurred after 5 weeks in the aspirin group, compared to 7 and 32, respectively, in the placebo group. Total mortality (vascular plus nonvascular) was reduced at both 35 days (9.4 percent versus 11.9 percent, odds ratio 0.77) and after 15 months median followup (16.0 percent versus 18.1 percent odds ratio 0.87) for the aspirin group and placebo group). The reduction in all-cause mortality was highly significant ($2p < 0.001$) at both times.

The beneficial effects of aspirin on vascular mortality in days 0 to 35 was found to be independent of streptokinase infusion. (See Table 1.)

TABLE 1.—BENEFICIAL EFFECTS OF ASPIRIN ON VASCULAR MORTALITY IN DAYS 0 TO 35

Treatment ¹ Tablet/Infusion	Vascular Deaths/No. of Subjects	Percent	Percent Absolute Change	Percent Reduction in Odds of Death
A/S+A/P vs P/S+P/P	804/8,587 ²	9.4		
	1,016/8,600 ³	11.8	-2.4	23 ($2p < 0.00001$)
A/P vs P/P	461/4,295	10.7		
	568/4,300	13.2	-2.5	21 ($2p < 0.001$)
A/S vs P/S	343/4,292	8.0		
	448/4,300	10.4	-2.4	25 ($2p < 0.001$)
A/S vs P/P	343/4,292	8.0		
	568/4,300	13.2	-5.2	42 ($2p < 0.00001$)
A/S vs A/P	343/4,292	8.0		
	461/4,295	10.7	-2.7	28 ($2p < 0.0001$)
P/S vs P/P	448/4,300	10.4		
	568/4,300	13.2	-2.8	23 ($2p < 0.0001$)
A/S+P/S vs A/P+P/P	791/8,592 ⁴	9.2		
	1,029/8,595 ⁵	12.0	-2.8	25 ($2p < 0.00001$)

¹ A=aspirin, S=streptokinase, and P=placebo.

² Includes 4,295 allocated aspirin tablets + placebo infusion and 4,292 allocated aspirin tablets + streptokinase infusion.

³ Includes 4,300 allocated placebo tablets + placebo infusion and 4,300 allocated placebo tablets + streptokinase infusion.

⁴ Includes 4,292 allocated aspirin tablets + placebo infusion and 4,300 allocated streptokinase infusion + placebo tablets.

⁵ Includes 4,295 allocated aspirin tablets + placebo infusion and 4,300 allocated placebo tablets + placebo infusion.

Each subject received one tablet and one infusion (e.g., each subject was allocated either a single active ingredient plus placebo, both active ingredients, or two placebos). Aspirin reduced the odds of death within 35 days by 25 percent (standard deviation (SD) 6) in people who were also given streptokinase infusion, and by 21

percent (SD 6) in people given a placebo infusion ($2p < 0.001$). Thus, aspirin was effective in reducing mortality both in the presence and absence of streptokinase.

Similarly, there were significantly fewer deaths in the streptokinase group compared to the placebo both in the presence and absence of aspirin. The effect of the combined therapy of aspirin

plus streptokinase was approximately additive. The 35-day vascular mortality of the group that received aspirin plus streptokinase was 8 percent compared to 13.2 percent for the double-placebo group. These results represent an absolute reduction of 5.2 percent and a 42-percent reduction in odds of death in

the aspirin plus streptokinase group (2p < 0.00001).

When specific clinical events (fatal plus nonfatal) that occurred in the hospital were evaluated separately, statistically significant absolute reductions favoring aspirin were found for reinfarction (1.5 percent absolute reduction, 45 percent odds reduction, 2p < 0.00001), cardiac arrest (1.2 percent absolute reduction, 14.2 percent odds reduction, 2p < 0.01), and total

stroke (0.4 percent absolute reduction, 41.5 percent odds reduction, 2p < 0.01). Moreover, the effect of aspirin over and above its effect on mortality was evidenced by small, but significant, reductions in vascular morbidity in those subjects who were discharged.

The combination of streptokinase infusion and daily aspirin was significantly better than either active treatment alone for vascular mortality (See Table 1). The differences in favor

of aspirin plus streptokinase compared to double placebo for specific clinical events were 1.1 percent in reinfarction, 2.5 percent in cardiac arrest, and 0.5 percent (2p = 0.02) in total stroke. The effects of aspirin and aspirin in combination with streptokinase on major clinical events that occurred in a hospital is shown in Table 2.

TABLE 2.—EFFECTS OF ASPIRIN AND ASPIRIN PLUS STREPTOKINASE ON MAJOR CLINICAL EVENTS IN HOSPITAL

	Aspirin			Aspirin plus Streptokinase		
	Aspirin Tablets	Placebo Tablets	Percent Absolute Change	Aspirin and Streptokinase	Placebo Infusion and Tablet	Percent Absolute Change
Number randomized	8,587	8,600		4,292	4,300	
Number discharged alive	8,492	8,489		4,239	4,238	
Reinfarction (any)	156	284	1.5	77	123	1.1
(any discharged alive)	83	170	1.0	46	61	0.4
Cardiac rupture (any)	69	81	0.1	31	38	0.2
(any discharged alive)	7	5	0.0	2	1	0.0
Cardiac arrest (any)	690	793	1.2	311	417	2.5
(any discharged alive)	259	289	0.4	133	129	-0.1
Stroke (any)	47	81	0.4	25	45	0.5
(fatal)	20	30	0.1	12	18	0.1
(disabled)	17	23	0.1	9	15	0.1
(not disabled)	10	28	0.2	4	12	0.2
(hemorrhagic)	5	2	0.0	5	0	-0.1
(any discharged alive)	27	51	0.3	13	27	0.3
Major bleeds (transfused)	31	33	0.0	24	11	-0.3
Minor bleeds						
(not transfused)	215	163	-0.6	167	33	-3.2

Subgroup analysis was done for 35-day vascular mortality for 3,945 women assigned to either aspirin (1,994) or oral placebo (1,951), and for 13,125 men assigned to aspirin (6,540) or oral placebo (6,585). Vascular mortality was higher in women than men in both the placebo and the aspirin group, but the absolute reduction of risk of vascular death was 2.6 percent for women and 2.4 percent for men, representing a 19 percent (p = 0.018) odds reduction for women and a 25 percent (p < 0.0001) odds reduction for men. These data suggest that beneficial effects of aspirin may be expected in treating both men and women for an acute MI.

Subgroup analyses suggest that all age groups analyzed benefited from aspirin. There were 1 percent fewer vascular deaths recorded for 3,870 subjects under 60 years of age who received aspirin than for 3,850 subjects who received oral placebo (18 percent relative risk reduction). In subjects 60 to 69 years old, 3.1 percent fewer vascular deaths were recorded for 2,999 subjects who received aspirin than for 3,057 subjects who received placebo (22 percent relative risk reduction). Subjects over 70

years old (1,718 on aspirin versus 1,693 on placebo) appeared to have the greatest (4.7 percent) absolute reduction in vascular death. The relative risk reduction in subjects over 70 years old was 21 percent for those who received aspirin.

However, the agency agrees with the investigators' conclusion that more weight should be placed on the overall results than on any particular subgroup of people. The agency has determined that the evidence is insufficient at present to validate efficacy results in particular subsets of patients with suspected acute MI.

The principal entry criterion for subjects in the ISIS-2 study was that the responsible physician suspected acute MI based on clinical presentation. The protocol did not require that MI be documented in those entering the study. The agency notes that the only preliminary indications of an MI are chest pain and changes in the ECG. The report did not indicate how many of the subjects actually had an acute MI. In a retrospective analysis, about 98 percent of the subjects admitted to the study had some ECG abnormality.

Aspirin produced similar-sized reductions in vascular mortality among subjects treated early and treated late after the onset of symptoms (odds reductions at 0 to 4, 5 to 12, and 13 to 24 hours were 25 percent, 21 percent, and 21 percent, respectively). The effects of streptokinase appeared to be greatest among those treated earliest. When comparing subjects who received both aspirin and streptokinase to subjects who received double placebo, the odds of death were more reduced among those subjects randomized 0 to 4 hours (53 percent odds reduction; 2p < 0.00001) after the onset of pain than those randomized later: 5 to 12 hours (32 percent odds reduction; 2p < 0.0001), and 13 to 24 hours (38 percent odds reduction; 2p < 0.01).

The aspirin regimen was well tolerated. There was no difference in the incidence of major bleeding (bleeds requiring transfusion) between the two groups (0.4 percent for aspirin; 0.4 percent for placebo). There was a small but statistically significant 0.6 percent (SD = 0.2, 2p < 0.01) increase in minor bleeding in people taking aspirin compared to placebo (2.5 versus 1.9

percent). No other significant adverse effects were reported. Although there were five confirmed cerebral hemorrhages in the aspirin group compared with two in the placebo group, this difference was not statistically significant. As discussed above, the incidence of stroke of any cause was lower in subjects taking aspirin when compared to those on oral placebo (47 versus 81), a 0.4 percent absolute reduction and a 41.5 percent reduction in odds of stroke ($2p < 0.01$) in subjects taking aspirin.

The second study (Ref. 4) was a study of low dose aspirin (75 mg daily) and intravenous heparin in 945 men with unstable coronary artery disease, defined as non-Q-wave MI or increasing angina within the previous 4 weeks associated with ischemia (deficiency of oxygen supply to the heart muscle, due to the constriction or obstruction of a blood vessel) in a resting ECG or during a predischarge exercise test. The subjects were randomized within 72 hours after admission to coronary care units to receive bolus intravenous injections of heparin (10,000 units 4 times a day for 1 day and 7,500 units 4 times a day for 4 additional days) or placebo (saline) for 5 days, and oral aspirin (75 mg daily) or placebo for 1 year. The study was stopped early after publication of the ISIS-2 study. As a result, the minimum period of randomized treatment was reduced to 3 months. A detailed report of this study has not been submitted to the agency for review.

One hundred and forty-nine subjects were excluded from the study (115 with no evidence of myocardial ischemia after an exercise test, and 34 with an anterior Q-wave MI before recruitment). The remaining 796 subjects were randomized to either double placebo (199), heparin and aspirin (210), aspirin and placebo (189), or heparin and placebo (198).

The combined rate of MI or death in subjects on aspirin (aspirin with placebo and aspirin with heparin) was 9.1 percent and 10.6 percent lower at 1 and 3 months, respectively, than the combined rate for subjects receiving placebo (double placebo or placebo with heparin), a risk reduction of 68 percent at 1 month ($p = 0.0001$) and 62 percent at 3 months ($p = 0.0001$). Heparin alone did not appear to affect the rate of death or MI. However, the combination of heparin and aspirin was the only regimen that significantly reduced the risk of MI during the first 5 days in the hospital. Thus, the authors suggested that reduction of events in the aspirin treated group may have been influenced

by initial simultaneous treatment with heparin.

A few side effects were reported with the daily aspirin dose used in this study, although details were not provided. Hematological side effects were reported to be rare and minor. Gastrointestinal side effects were similar in the aspirin and placebo groups at 1 month, but were more frequent with aspirin (5.2 percent to 6.5 percent) than with placebo (0.7 percent to 1.9 percent) at 3 months.

This study primarily involved the use of aspirin in subjects with unstable angina. The agency has already accepted the benefits of aspirin in unstable angina and has included that indication in § 343.80(c).

The third study (Ref. 5) compared the effect of aspirin (100 mg daily) to placebo for 3 months on infarct size, death, reinfarction, unstable angina, and revascularization in 100 subjects with early symptoms of first anterior wall acute MI. All subjects also received subcutaneous heparin until they were mobilized. In addition, those subjects who were less than 70 years of age and had symptoms for less than 4 hours when recruited (24 subjects on aspirin and 26 subjects on placebo) also received thrombolysis therapy (intravenous streptokinase). The study was randomized for aspirin but not for thrombolysis.

The primary endpoint was infarct size in the first 72 hours. The size of the infarct was determined by the cumulative release of serum lactate dehydrogenase (LDH) in the first 72 hours. Secondary endpoints were death, reinfarction, unstable angina, and revascularization. The results showed a 10 percent difference in infarct size ($1,431 \pm 782$ versus $1,592 \pm 1,082$ LDH units per liter) for the aspirin versus placebo group. This difference was not statistically significant ($p = 0.35$). Of the secondary endpoints evaluated, only reinfarction was significantly lower in the aspirin than the placebo group (4 percent versus 18 percent, $p < 0.03$) at 3 months. Mortality rate was 20 percent in subjects given aspirin compared to 24 percent in those given placebo. This difference was not statistically significant ($p = 0.65$).

The significant reduction in incidence of reinfarction in this study is surprising because of the small size of the study and may depend on an atypical incidence of reinfarction in the control group (18 percent at 3 months). This was much higher than in the control group of the ISIS-2 study (approximately 3 percent at 35 days). Followup for this third study was longer than for the ISIS-2 study (3 months

versus 35 days). Only subjects with early signs of first anterior wall infarction were eligible for entry in the third study, while in the ISIS-2 study subjects with only "suspected acute MI" were eligible. The more stringent entry criteria and the longer followup period may account for the higher incidence of reinfarction in the control group and the significant effect of aspirin on reinfarction in the third study. A detailed report of this study was not submitted to the agency. Based on the information provided, this study provides little additional evidence of the effectiveness of aspirin in treating acute MI.

The fourth study (Ref. 6) was an uncontrolled study to evaluate infarct vessel patency in subjects started on both aspirin (325 mg/day) and dipyridamole (75 mg/day) after thrombolytic therapy with streptokinase. In the absence of a control group, the study cannot provide any information on the effectiveness of aspirin in treating acute MI.

The second petition (Ref. 2) also requested the agency to approve professional labeling for aspirin for prevention of fatal and nonfatal cardiovascular events in patients with suspected acute MI. The petition requested approval of an initial dose of "at least 162 mg aspirin" during the 24 hours following acute MI, with continued treatment for at least the subsequent 30-day followup period at the minimum dose of 162 mg/day. The petition relied primarily on the results of ISIS-2 (Ref. 3) to support the labeling claim. Data from that study are summarized above.

In addition to ISIS-2, the petition included results of four published efficacy studies of aspirin in acute MI (Refs. 5, 7, 8, and 9). The study by Verheugt et al. (Ref. 5) was also submitted in the first petition and is discussed above.

In the ISIS-2 pilot study (Ref. 7), there was a nonsignificant reduction in nonfatal reinfarction in 313 subjects who received 325 mg aspirin on alternate days compared with 306 subjects who received placebo. In-hospital death (all causes) was reported to be significantly lower in the aspirin-treated group. Postdischarge death was reported at a similar rate in both the aspirin and placebo subjects.

Elwood and Williams (Ref. 8) found no evidence of reduced mortality in males or females evaluated up to 28 days after a single 300 mg dose of aspirin. Aspirin or placebo was administered to 2,530 subjects, upon first suspicion of acute MI. Analysis was

confined to 1,705 subjects in whom acute MI was subsequently confirmed.

Husted et al. (Ref. 9) compared aspirin 100 mg/day, aspirin 1,000 mg/day, and placebo in 293 subjects with suspected acute MI. An intent-to-treat analysis showed no significant difference between groups. A significant benefit of 100 mg/day (but not 1,000 mg/day) on the combined incidence of cardiac death and nonfatal MI was found when subjects who withdrew from the study were excluded from the analysis. No conclusions were drawn as to the reasons for the difference in effect between a 100 mg and 1,000 mg daily dose.

The agency received additional comments that raised other issues related to professional labeling of aspirin for cardiovascular use. Those issues will be addressed in a future issue of the *Federal Register*.

B. Summary of the Agency's Evaluation

The agency has determined that the ISIS-2 study (Ref. 3) supports the use of aspirin at a dose of 162.5 mg/day, started as soon as possible after an infarction and continued for at least 30 days to reduce the risk of fatal and nonfatal cardiovascular and cerebrovascular events in subjects with a suspected acute MI. The study also shows that the effect of aspirin is not diminished with concomitant early treatment with a thrombolytic (i.e., an immediate 1-hour, single-dose, infusion of 1.5 million units of streptokinase). Aspirin treatment should be started as soon as the physician suspects an MI, rather than delaying treatment until definitive testing can be done. A significant benefit of aspirin in reducing the risk of vascular death was seen in ISIS-2 for aspirin alone compared to placebo as well as for aspirin plus streptokinase compared to streptokinase alone, representing, in effect, two separate studies showing a benefit of aspirin. This internal replication supports the indication for treatment of acute MI. The large number of investigators involved in the study and the consistency of results among countries lend further credibility to the results of this single study.

The benefit of aspirin is evident for both all-cause mortality and vascular mortality for aspirin alone and for aspirin in addition to early thrombolytic treatment. Although the most important effect of aspirin in acute MI is the reduction in mortality, small, but statistically significant, decreases in nonfatal reinfarction and stroke were also found. Overall, the other studies included in the petitions are consistent with a favorable effect of aspirin in the

acute and subacute MI setting, but do not provide substantial support for ISIS-2. While the dosage in the ISIS-2 study was 162.5 mg enteric-coated aspirin daily, the agency believes one-half of a conventional 325-mg tablet or two 80- or 81-mg tablets are also reasonable doses (i.e., a range of 160 to 162.5 mg).

In the 1988 TFM (53 FR 46204 at 46229 and 46231), the agency proposed (in § 343.20(b)(3)) that aspirin, buffered aspirin, and aspirin in combination with antacids are effective to treat patients with TIA, a previous MI, or unstable angina pectoris. That proposal was based on recommendations of the Peripheral and Central Nervous System Drugs Advisory Committee, the agency's review of data submitted to show that buffered aspirin would be expected to have similar effects, and on the data from an unstable angina trial that used a highly buffered aspirin solution. Based on those data, the agency is proposing that aspirin, buffered aspirin, or aspirin in combination with an antacid may be used to treat patients with a suspected acute MI. After the 30-day recommended treatment with aspirin for acute MI, physicians should consider further therapy based on the labeling for dosage and administration of aspirin for prevention of recurrent MI (reinfarction).

Based on the above discussion, the agency is now proposing several changes in the professional labeling proposed in § 343.80(c) for OTC drug products containing aspirin proposed in § 343.10(b) or permitted combinations proposed in § 343.20(b)(3) as follows: (1) Add information for treatment of a suspected acute MI, and (2) revise some of the previously proposed text based on additional information from the ISIS-2 study (Ref. 8).

III. Summary of Agency Changes

In summary, the agency is proposing to add the following to the professional labeling in § 343.80(c): An indication for aspirin to reduce the risk of vascular mortality in patients with a suspected acute MI; the findings of the ISIS-2 study under "Clinical Trials;" a dosage of 160 to 162.5 mg for a suspected acute MI taken as soon as the infarct is suspected and then daily for at least 30 days; and a statement that this use of aspirin applies to both solid, oral dosage forms and buffered aspirin in solution.

To add the findings of the ISIS-2 study and to improve readability, the agency is also proposing the following: Change the heading from "Indication" to "Indications;" add the subheadings, "Recurrent MI (Reinfarction) or Unstable Angina Pectoris" and

"Suspected Acute MI," under the headings "Indications," "Clinical Trials," and "Dosage and Administration;" revise the text under "Gastrointestinal Reactions" and change from 300 mg aspirin to 160 mg aspirin daily the dosage level at which subjects should have biochemical measurements assessed; add a subheading, "Bleeding," under the heading "Adverse Reactions" (after "Gastrointestinal Reactions"); renumber existing reference (8) as reference (9); and add a new reference (8).

IV. References

The following references are on display in the Dockets Management Branch (address above) and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday.

(1) Comment No. CP9, Docket No. 77N-0094, Dockets Management Branch.

(2) Comment No. CP10, Docket No. 77N-0094, Dockets Management Branch.

(3) ISIS-2 (Second International Study of Infarct Survival) Collaborative Group, "Randomized Trial of Intravenous Streptokinase, Oral Aspirin, Both, or Neither Among 17,187 Cases of Suspected Acute Myocardial Infarction: ISIS-2," *Lancet*, 2:349-360, 1988.

(4) RISC Group, "Risk of Myocardial Infarction and Death During Treatment with Low Dose Aspirin and Intravenous Heparin in Men with Unstable Coronary Artery Disease," *Lancet*, 336:827-830, 1990.

(5) Verheugt, F. W. et al., "Effects of Early Intervention with Low-dose Aspirin (100 mg) on Infarct Size, Reinfection and Mortality in Anterior Wall Acute Myocardial Infarction," *American Journal of Cardiology*, 66:267-270, 1990.

(6) Hays, L. J. et al., "Short-term Infarct Vessel Patency with Aspirin and Dipyridamole Started 24 to 36 Hours After Intravenous Streptokinase," *American Heart Journal*, 115:717-721, 1988.

(7) ISIS Pilot Study Investigators, "Randomized Factorial Trial of High-Dose Intravenous Streptokinase, of Oral Aspirin, and of Intravenous Heparin in Acute Myocardial Infarction," *European Heart Journal*, 8:634-642, 1987.

(8) Elwood, P. C., and W. O. Williams, "A Randomized Controlled Trial of Aspirin in the Prevention of Early Mortality in Myocardial Infarction," *Journal of the Royal College of General Practitioners*, 29:413-416, 1979.

(9) Husted, S. E. et al., "Acetylsalicylic Acid 100 mg and 1,000 mg Daily in Acute Myocardial Infarction Suspects: A Placebo-Controlled Trial," *Journal of Internal Medicine*, 226:303-310, 1989.

V. Enforcement Policy

The agency is allowing the proposed professional labeling to be used prior to the completion of a final rule for OTC internal analgesic, antipyretic, and antirheumatic drug products. This decision is based on the substantial data

supporting the safety and effectiveness of aspirin for suspected acute MI and on the importance of early dissemination of this information to health professionals. Manufacturers who disseminate this information must use the exact professional labeling set forth in this proposal. Such labeling may be disseminated pending issuance of a final rule, subject to the risk that the agency may, in the final rule, adopt a different position that could require relabeling, recall, or other regulatory action. Those manufacturers who do not wish to revise the professional labeling in accordance with this proposal may continue to disseminate the labeling proposed in the 1988 TFM (53 FR 46204 at 46258 through 46260) until a final rule becomes effective. Dissemination of professional labeling that is not in accord with the labeling in the 1988 TFM or with this proposed amendment to the 1988 TFM may result in regulatory action against the product, the marketer, or both.

VI. Analysis of Impacts

FDA has examined the impacts of the proposed rule under Executive Order 12866 and the Regulatory Flexibility Act (Pub. L. 96-354). Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). The agency believes that this proposed rule is consistent with the regulatory philosophy and principles identified in the Executive Order. In addition, the proposed rule is not a significant regulatory action as defined by the Executive Order and so is not subject to review under the Executive Order.

The Regulatory Flexibility Act requires agencies to analyze regulatory options that would minimize any significant impact of a rule on small entities. If this proposed rule becomes a final rule, direct one-time costs associated with changing professional labeling will be imposed. That cost is estimated to be less than \$1 million. Also, there appears to be a limited number of aspirin products involved because many manufacturers of these products do not distribute professional labeling for their products. Manufacturers who do distribute such professional labeling will have an additional claim to make for their product(s) and will have 1 year after publication of the final rule to implement this relabeling. Accordingly,

the agency certifies that the proposed rule will not have a significant economic impact on a substantial number of small entities. Therefore, under the Regulatory Flexibility Act, no further analysis is required.

The agency invites public comment regarding any substantial or significant economic impact that this rulemaking would have on the professional labeling of OTC internal analgesic, antipyretic, and antirheumatic drug products that contain aspirin, buffered aspirin, or aspirin in combination with antacid. Types of impact may include, but are not limited to, costs associated with relabeling. Comments regarding the impact of this rulemaking on these OTC drug products should be accompanied by appropriate documentation. The agency will evaluate any comments and supporting data that are received and will reassess the economic impact of this rulemaking in the preamble to the final rule.

VII. Paperwork Reduction Act of 1995

FDA tentatively concludes that the labeling requirements proposed in this document are not subject to review by the Office of Management and Budget because they do not constitute a "collection of information" under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). Rather, the proposed labeling statements are a "public disclosure of information originally supplied by the Federal Government to the recipient for the purpose of disclosure to the public" (5 CFR 1320.3(c)(2)).

VIII. Environmental Impact

The agency has determined under 21 CFR 25.24(c)(6) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

IX. Request for Comments

Interested persons may, on or before September 11, 1996, submit to the Dockets Management Branch (address above) written comments regarding this proposal. Written comments on the agency's economic impact determination may be submitted on or before September 11, 1996. Three copies of all comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document and may be accompanied by a supporting memorandum or brief. Received comments may be seen in the

office above between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects in 21 CFR Part 343

Labeling, Over-the-counter drugs. Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, it is proposed that 21 CFR part 343 (proposed in the Federal Register of November 16, 1988, 53 FR 46204) be amended as follows:

PART 343—INTERNAL ANALGESIC, ANTIPYRETIC, AND ANTIRHEUMATIC DRUG PRODUCTS FOR OVER-THE-COUNTER HUMAN USE

1. The authority citation for 21 CFR part 343 continues to read as follows:

Authority: Secs. 201, 501, 502, 503, 505, 510, 701 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321, 351, 352, 353, 355, 360, 371).

2. Section 343.80 is amended by revising paragraph (c) to read as follows:

§ 343.80 Professional labeling.

* * * * *

(c) For products containing aspirin identified in § 343.10(b) or permitted combinations identified in § 343.20(b)(3). The labeling states, under the heading "ASPIRIN FOR MYOCARDIAL INFARCTION," the following:

Indications:

Recurrent Myocardial Infarction (MI) (Reinfarction) or Unstable Angina Pectoris

Aspirin is indicated to reduce the risk of death and/or nonfatal MI in patients with a previous MI or unstable angina pectoris.

Suspected Acute MI

Aspirin is indicated to reduce the risk of vascular mortality in patients with a suspected acute MI.

Clinical Trials:

Recurrent MI (Reinfarction) and Unstable Angina Pectoris

The indication is supported by the results of six large, randomized multicenter, placebo-controlled studies involving 10,816, predominantly male, post-MI subjects and one randomized placebo-controlled study of 1,266 men with unstable angina (1-7). Therapy with aspirin was begun at intervals after the onset of acute MI varying from less than 3 days to more than 5 years and continued for periods of from less than 1 year to 4 years. In the unstable angina study, treatment was started within 1 month after the onset of unstable angina and continued for 12 weeks, and patients with complicating conditions such as congestive heart failure were not included in the study.

Aspirin therapy in MI subjects was associated with about a 20-percent reduction in the risk of subsequent death and/or nonfatal reinfarction, a median absolute decrease of 3 percent from the 12- to 22-percent event rates in the placebo groups. In aspirin-treated unstable angina patients the reduction in risk was about 50-percent, a

reduction in the event rate of 5-percent from the 10-percent rate in the placebo group over the 12-weeks of the study.

Daily dosage of aspirin in the post-MI studies was 300 milligrams in one study and 900 to 1,500 milligrams in five studies. A dose of 325 milligrams was used in the study of unstable angina.

Suspected Acute MI

The use of aspirin in patients with a suspected acute MI is supported by the results of a large, multicenter 2 x 2 factorial study of 17,187 subjects with suspected acute MI (8). Subjects were randomized within 24 hours of the onset of symptoms so that 8,587 subjects received oral aspirin (162.5 milligrams, enteric-coated) daily for 1 month (the first dose crushed, sucked, or chewed) and 8,600 received oral placebo. Of the subjects, 8,592 were also randomized to receive a single dose of streptokinase (1.5 million units) infused intravenously for about 1 hour, and 8,595 received a placebo infusion. Thus, 4,295 subjects received aspirin plus placebo, 4,300 received streptokinase plus placebo, 4,292 received aspirin plus streptokinase, and 4,300 received double placebo.

Vascular mortality (attributed to cardiac, cerebral, hemorrhagic, other vascular, or unknown causes) occurred in 9.4 percent of the subjects in the aspirin group and in 11.8 percent of the subjects in the oral placebo group in the 35-day followup. This represents an absolute reduction of 2.4 percent in the mean 35-day vascular mortality attributable to aspirin and a 23-percent reduction in the odds of vascular death ($2p < 0.00001$).

Significant absolute reductions in mortality and corresponding reductions in specific clinical events favoring aspirin were found for reinfarction (1.5 percent absolute reduction, 45 percent odds reduction, $2p < 0.00001$); cardiac arrest (1.2 percent absolute reduction, 14.2 percent odds reduction, $2p < 0.01$); and total stroke (0.4 percent absolute reduction, 41.5 percent odds reduction, $2p < 0.01$). The effect of aspirin over and above its effect on mortality was evidenced by small, but significant, reductions in vascular morbidity in those subjects who were discharged.

The beneficial effects of aspirin on mortality were present with or without streptokinase infusion. Aspirin reduced vascular mortality from 10.4 to 8.0 percent for days 0 to 35 in subjects given streptokinase and reduced vascular mortality from 13.2 to 10.7 percent in subjects given no streptokinase.

The effects of aspirin and thrombolytic therapy with streptokinase in this study were approximately additive. Subjects who received the combination of streptokinase infusion and daily aspirin had significantly lower vascular mortality at 35 days than those who received either active treatment alone (combination 8.0 percent, aspirin 10.7 percent, streptokinase 10.4 percent, and no treatment 13.2 percent). While this study demonstrated that aspirin has an additive benefit in patients given streptokinase, there is no reason to restrict its use to that specific thrombolytic.

Adverse Reactions:

Gastrointestinal Reactions

Doses of 1,000 milligrams per day of aspirin caused gastrointestinal symptoms and bleeding that in some cases were clinically significant. In the Aspirin Myocardial Infarction Study (AMIS) (4) with 4,500 post-infarction subjects, the percentage incidences of gastrointestinal symptoms for the aspirin (1,000 milligrams of a standard, solid-tablet formulation) and placebo-treated subjects, respectively, were: Stomach pain (14.5 percent, 4.4 percent); heartburn (11.9 percent, 4.8 percent); nausea and/or vomiting (7.6 percent, 2.1 percent); hospitalization for gastrointestinal disorder (4.8 percent, 3.5 percent). Symptoms and signs of gastrointestinal irritation were not significantly increased in subjects treated for unstable angina with 325 milligrams buffered aspirin in solution.

Bleeding

In the AMIS and other trials, aspirin-treated subjects had increased rates of gross gastrointestinal bleeding. In the ISIS-2 study (8), there was no significant difference in the incidence of major bleeding (bleeds requiring transfusion) between 8,587 subjects taking 162.5 milligrams aspirin daily and 8,600 subjects taking placebo (31 versus 33 subjects). There were five confirmed cerebral hemorrhages in the aspirin group compared with two in the placebo group, but the incidence of stroke of all causes was significantly reduced from 81 to 47 for the placebo versus aspirin group (0.4 percent absolute change). There was a small and statistically significant excess (0.6 percent) of minor bleeding in people taking aspirin (2.5 percent for aspirin, 1.9 percent for placebo). No other significant adverse effects were reported.

(Other applicable warnings related to the use of aspirin as described in §343.50(c) may also be included here.)

Cardiovascular and Biochemical

In the AMIS trial (4), the dosage of 1,000 milligrams per day of aspirin was associated with small increases in systolic blood pressure (BP) (average 1.5 to 2.1 millimeters Hg) and diastolic BP (0.5 to 0.6 millimeters Hg), depending upon whether maximal or last available readings were used. Blood urea nitrogen and uric acid levels were also increased, but by less than 1.0 milligram percent.

Subjects with marked hypertension or renal insufficiency had been excluded from the trial so that the clinical importance of these observations for such subjects or for any subjects treated over more prolonged periods is not known. It is recommended that patients placed on long-term aspirin treatment, even at doses of 160 milligrams per day, be seen at regular intervals to assess changes in these measurements.

Sodium in Buffered Aspirin for Solution Formulations:

One tablet daily of buffered aspirin in solution adds 553 milligrams of sodium to that in the diet and may not be tolerated by patients with active sodium-retaining states such as congestive heart or renal failure. This amount of sodium adds about 30 percent to the 70- to 90-milliequivalent intake suggested as appropriate for dietary treatment of essential hypertension in the "1984 Report of

the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure" (9).

Dosage and Administration: Recurrent MI (Reinfarction) and Unstable Angina Pectoris

Although most of the studies used dosages exceeding 300 milligrams, two trials used only 300 milligrams, and pharmacologic data indicate that this dose inhibits platelet function fully. Therefore, 300 milligrams or a conventional 325 milligram aspirin dose is a reasonable, routine dose that would minimize gastrointestinal adverse reactions. This use of aspirin applies to both solid, oral dosage forms (buffered and plain aspirin) and buffered aspirin in solution.

Suspected Acute MI

The recommended dose of aspirin to treat suspected acute MI is 160 to 162.5 milligrams taken as soon as the infarct is suspected and then daily for at least 30 days. (One-half of a conventional 325-milligram aspirin tablet or two 80- or 81-milligram aspirin tablets may be taken.) This use of aspirin applies to both solid, oral dosage forms (buffered, plain, and enteric-coated aspirin) and buffered aspirin in solution. If using a solid dosage form, the first dose should be crushed, sucked, or chewed. After the 30-day treatment, physicians should consider further therapy based on the labeling for dosage and administration of aspirin for prevention of recurrent MI (reinfarction).

(1) Elwood, P. C. et al., "A Randomized Controlled Trial of Acetylsalicylic Acid in the Secondary Prevention of Mortality from Myocardial Infarction," *British Medical Journal*, 1:436-440, 1974.

(2) The Coronary Drug Project Research Group, "Aspirin in Coronary Heart Disease," *Journal of Chronic Diseases*, 29:625-642, 1976.

(3) Breddin, K. et al., "Secondary Prevention of Myocardial Infarction: A Comparison of Acetylsalicylic Acid, Phenprocoumon or Placebo," *Homeostasis*, 470:263-268, 1979.

(4) Aspirin Myocardial Infarction Study Research Group, "A Randomized, Controlled Trial of Aspirin in Persons Recovered from Myocardial Infarction," *Journal of the American Medical Association*, 243:661-669, 1980.

(5) Elwood, P. C., and P. M. Sweetnam, "Aspirin and Secondary Mortality After Myocardial Infarction," *Lancet*, II:1313-1315, December 22-29, 1979.

(6) The Persantine-Aspirin Reinfarction Study Research Group, "Persantine and Aspirin in Coronary Heart Disease," *Circulation*, 62:449-461, 1980.

(7) Lewis, H. D. et al., "Protective Effects of Aspirin Against Acute Myocardial Infarction and Death in Men with Unstable Angina, Results of a Veterans Administration Cooperative Study," *New England Journal of Medicine*, 309:396-403, 1983.

(8) ISIS-2 (Second International Study of Infarct Survival) Collaborative Group, "Randomized Trial of Intravenous Streptokinase, Oral Aspirin, Both, or Neither Among 17,187 Cases of Suspected Acute Myocardial Infarction: ISIS-2," *Lancet*, 2:349-360, August 13, 1988.

(9) "1984 Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure," United States Department of Health and Human Services and United States Public Health Service, National Institutes of Health, Publication No. NIH 84-1088, 1984.

Dated: June 5, 1996.

William K. Hubbard,

Associate Commissioner for Policy Coordination.

[FR Doc. 96-14894 Filed 6-12-96; 8:45 am]

BILLING CODE 4160-01-F

ARMS CONTROL AND DISARMAMENT AGENCY

22 CFR Part 603

Privacy Act Policy and Procedures

AGENCY: Arms Control and Disarmament Agency.

ACTION: Notice of proposed rulemaking.

SUMMARY: The United States Arms Control and Disarmament Agency (ACDA) proposes to revise and restate in their entirety its rules that govern the means by which individuals can examine and request correction of ACDA records containing personal information. By clarifying these rules, this proposal will help the public interact better with ACDA and is part of ACDA's effort to update and streamline its regulations. ACDA invites comments from interested groups and members of the public on the proposed regulations.

DATES: To be considered, comments must be delivered by mail or in person to the address, or faxed to the telephone number, listed below by 5 p.m. on Friday, July 19, 1996.

ADDRESSES: Comments should be directed to the Office of the General Counsel, United States Arms Control and Disarmament Agency, Room 5635, 320 21st Street, NW, Washington, DC 20451; FAX (202) 647-0024. Comments will be available for inspection between 8:15 a.m. and 5 p.m. at the same address.

FOR FURTHER INFORMATION CONTACT: Frederick Smith, Jr., United States Arms Control and Disarmament Agency, Room 5635, 320 21st Street, NW, Washington, DC 20451, telephone (202) 647-3596.

SUPPLEMENTARY INFORMATION: ACDA proposes to update, clarify, reorganize, and streamline its rules implementing the Privacy Act, as amended. In addition to containing internal policies and procedures, these regulations set forth procedures whereby an individual can determine if a system of records maintained by ACDA contains records

pertaining to the individual and can request disclosure and amendment of such records. These regulations also set forth the bases for denying amendment requests and the procedures for appealing such denials. ACDA does not intend the proposed rules to materially affect current ACDA standards, policies, or practices.

Regulatory Flexibility Act Certification

It is hereby certified that the proposed rule will not have a significant economic impact on a substantial number of small entities. Accordingly, a regulatory flexibility analysis is not required.

Executive Order 12866 Determination

ACDA has determined that the proposed rule is not a significant regulatory action within the meaning of section 3(f) of that Executive Order.

Paperwork Reduction Act Statement

The proposed rule is not subject to the provisions of the Paperwork Reduction Act because it does not contain any information collection requirements within the meaning of that Act.

Unfunded Mandates Act Determination

ACDA has determined that the proposed rule will not result in expenditures by state, local, and tribal governments, or by the private sector, of more than \$100 million in any one year. Accordingly, a budgetary impact statement is not required under section 202 of the Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1532.

List of Subjects in 22 CFR Part 603

Privacy Act.

The Proposed Regulations

ACDA proposes to revise 22 CFR part 603 to read as follows:

PART 603—PRIVACY ACT POLICY AND PROCEDURES

Sec.

- 603.1 Purpose and scope.
- 603.2 Definitions.
- 603.3 Policy.
- 603.4 Requests for determination of existence of records.
- 603.5 Requests for disclosure to an individual of records pertaining to the individual.
- 603.6 Requests for amendment of records.
- 603.7 Appeals from denials of requests.
- 603.8 Exemptions.
- 603.9 New and amended systems of records.
- 603.10 Fees.

Authority: 5 U.S.C. 552a; 22 U.S.C. 2531; and 31 U.S.C. 9701.

§ 603.1 Purpose and scope.

This part 603 contains the regulations of the U.S. Arms Control and Disarmament Agency implementing the provisions of the Privacy Act of 1974, 5 U.S.C. 552a. In addition to containing internal policies and procedures, these regulations set forth procedures whereby an individual can determine if a system of records maintained by the Agency contains records pertaining to the individual and can request disclosure and amendment of such records. These regulations also set forth the bases for denying amendment requests and the procedures for appealing such denials.

§ 603.2 Definitions.

As used in this part:

(a) *Act* means the Privacy Act of 1974, 5 U.S.C. 552a.

(b) *ACDA* and *Agency* mean the U.S. Arms Control and Disarmament Agency.

(c) *Privacy Act Officer* means the Agency official who receives and acts upon inquiries, requests for access and requests for amendment.

(d) *Deputy Director* means the Deputy Director of the Agency.

(e) *Individual* means a citizen of the United States or an alien lawfully admitted for permanent residence;

(f) *Maintain* includes maintain, collect, use, or disseminate;

(g) *Record* means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the name of, or the identifying number, symbol, or other identification, particularly assigned to, the individual, such as a finger or voice print or a photograph;

(h) *System of records* means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identification particularly assigned to the individual.

(i) *Statistical record* means a record in a system of records maintained for statistical research or reporting purposes only and not used in whole or in part in making any determination about an identifiable individual, except as provided by section 8 of title 13 U.S.C.; and

(j) *Routine use* means, with respect to the disclosure of a record, the use of such record for a purpose which is compatible with the purpose for which it was collected.