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4164-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA-2022-N-0081]

Agency Information Collection Activities; Submission for Office of Management and Budget Review; Comment Request; Tradeoff Analysis of Prescription Drug Product Claims in Direct-to-Consumer and Healthcare Provider Promotion

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that a proposed collection of information has been submitted to the Office of Management and Budget (OMB) for review and clearance under the Paperwork Reduction Act of 1995.

DATES: Submit written comments (including recommendations) on the collection of information by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: To ensure that comments on the information collection are received, OMB recommends that written comments be submitted to https://www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under Review--Open for Public Comments" or by using the search function. The title of this information collection is "Tradeoff Analysis of Prescription Drug Product Claims in Direct-to-Consumer and Healthcare Provider Promotion." Also include the FDA docket number found in brackets in the heading of this document.

FOR FURTHER INFORMATION CONTACT: Jonna Capezzuto, Office of Operations, Food and Drug Administration, Three White Flint North, 10A-12M, 11601 Landsdown St., North Bethesda, MD 20852, 301-796-3794, PRAStaff@fda.hhs.gov.

For copies of the questionnaire, contact: Office of Prescription Drug Promotion (OPDP) Research Team, DTCresearch@fda.hhs.gov.

SUPPLEMENTARY INFORMATION: In compliance with 44 U.S.C. 3507, FDA has submitted the following proposed collection of information to OMB for review and clearance.

Tradeoff Analysis of Prescription Drug Product Claims in Direct-to-Consumer and Healthcare Provider Promotion

OMB Control Number 0910-NEW

I. Background

Section 1701(a)(4) of the Public Health Service Act (42 U.S.C. 300u(a)(4)) authorizes FDA to conduct research relating to health information. Section 1003(d)(2)(C) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21 U.S.C. 393(d)(2)(C)) authorizes FDA to conduct research relating to drugs and other FDA-regulated products in carrying out the provisions of the FD&C Act.

The OPDP's mission is to protect the public health by helping to ensure that prescription drug promotion is truthful, balanced, and accurately communicated. OPDP's research program provides scientific evidence to help ensure that our policies related to prescription drug promotion will have the greatest benefit to public health. Toward that end, we have consistently conducted research to evaluate the aspects of prescription drug promotion that are most central to our mission. Our research focuses in particular on three main topic areas: (1) advertising features, including content and format; (2) target populations; and (3) research quality. Through the evaluation of advertising features, we assess how elements such as graphics, format, and disease and product characteristics impact the communication and understanding of prescription drug risks and benefits. Focusing on target populations allows us to evaluate how understanding of prescription drug risks and benefits may vary as a function of audience, and our focus on research quality aims at maximizing the quality of research data through analytical methodology

development and investigation of sampling and response issues. This study will inform the first and second topic areas, advertising features and target populations.

Because we recognize that the strength of data and the confidence in the robust nature of the findings are improved by using the results of multiple converging studies, we continue to develop evidence to inform our thinking. We evaluate the results from our studies within the broader context of research and findings from other sources, and this larger body of knowledge collectively informs our policies as well as our research program. Our research is documented on our home page, which can be found at: https://www.fda.gov/about-fda/center-drug-evaluation-and-research-cder/office-prescription-drug-promotion-opdp-research. The website includes links to the latest *Federal Register* notices and peer-reviewed publications produced by our office.

The proposed research examines the relative importance of prescription drug product information such as prescription drug efficacy, risk, adherence, and patient preference claims in two medical conditions (type 2 diabetes and psoriasis) in consumer and physician samples. When confronted with an important decision, people tend to make choices that reflect a series of tradeoffs between certain desirable and undesirable attributes of a product, service, or experience. Pharmaceutical manufacturers provide information about prescription drug products, including side effects, contraindications, and effectiveness, through product labeling and promotional materials (21 CFR 202.1(e)). The treatment choices of diagnosed consumers and treating physicians have been shown to be influenced by certain characteristics, such as the drug's perceived impact on quality of life, complexity of dosage regimens, mode of administration, cost to family and self, and marketing claims unrelated to medicinal properties (Refs. 1 to 5). Although diagnosed consumers may weigh the risks, benefits, or other salient characteristics of prescription drug products differently than physicians, little research directly compares the treatment preferences of these two groups (Ref. 6). Understanding the tradeoffs among drug product characteristics diagnosed consumers make--and how the tradeoffs could

potentially differ from the tradeoffs made by physicians--will provide valuable insight into the relevance and impact of various product attributes and promotional claims on informed choices and treatment decisions.

We intend to examine these tradeoffs using a choice-based conjoint analysis, also known as a discrete choice experiment. Conjoint analysis is a broad class of survey-based techniques used to estimate how attractive or influential different features of choice options or product attributes are in determining purchase behavior or treatment choices (Ref. 7). Conjoint analysis can be used to examine the joint effects and tradeoffs of multiple variables or product attributes on decisions. A choice-based conjoint analysis is based on the principle that products are composed of a set of attributes, and each attribute can be described using a finite number of levels. In the proposed research, participants will be shown a carefully designed sequence of choice tasks containing up to five hypothetical product attributes--in this case, profiles describing fictitious prescription drug products for either type 2 diabetes or psoriasis. Using data from the choices that participants make across these tasks, we can use statistical techniques to draw inferences about the relative value they place on different product attributes, estimate the relative importance of different attributes, explore the tradeoffs that consumers and physicians are willing to make to avoid or accept specific attribute levels, and compare the preferences of these two groups (Ref. 8).

We estimate that participation in the study will take approximately 20 minutes. Adult participants aged 18 years or older will be recruited by email through an internet panel, and participant eligibility will be determined with a screener at the beginning of the online survey. The consumer sample will consist of adults who self-report as having been diagnosed by a healthcare provider with either psoriasis or type 2 diabetes. For the consumer sample, we will exclude individuals who work in healthcare settings because their knowledge and experiences may not reflect those of the average consumer. The physician sample will consist of primary care physicians and specialists who report treating patients with psoriasis or type 2 diabetes. For

the physician sample, we will exclude individuals who spend less than 50 percent of their time on direct patient care. Department of Health and Human Services employees and individuals who work in the marketing, advertising, or pharmaceutical industries will be excluded from both respondent groups. Respondents will receive a survey invitation with a unique password-protected link. All panel members are recruited following a double opt-in process. Sample sizes were estimated by combining approaches for conjoint analysis suggested by Orme (Ref. 9) and Johnson et al. (Ref. 10).

The target sample size for the main study is 800 physicians and 800 consumers, with half of each cohort focusing on treatments for psoriasis and the other half focusing on treatments for type 2 diabetes. Prior to conducting the main study, we will conduct at least one pretest. If the first pretest reveals that changes to the measurement instruments, stimuli, or procedures are required, a second pretest will be conducted with revised materials. The target sample size for each wave of pretests is 60 physicians and 60 consumers.

In the *Federal Register* of April 25, 2022 (87 FR 24313), FDA published a 60-day notice requesting public comment on the proposed collection of information. Two submissions (https://www.regulations.gov tracking numbers l3s-66ri-uyh2 and l2z-6w2l-mpk1) were outside the scope of the research and are not addressed further.

FDA received eight comments that were PRA-related. Within those submissions, FDA received multiple comments that the Agency has addressed. For brevity, some public comments are paraphrased and therefore may not state the exact language used by the commenter. We assure the commenter that the entirety of their comments was considered even if not fully captured by our paraphrasing in this document. Comments and responses are numbered here for organizational purposes only.

(Comment 1) Five comments expressed support for the study.

(Response 1) We acknowledge and appreciate the support of this study.

(Comment 2) One comment stated the collection of information is not necessary for the proper performance of FDA functions and questioned the practical utility of the study. Another comment asked for clarification about how the results would be applied to OPDP decision making. The first of these comments suggests that an alternate approach would be to dedicate resources to enforcing heavier penalties for misleading, incomplete, or false information.

(Response 2) The OPDP's mission is to protect the public health by helping to ensure that prescription drug promotion is truthful, balanced, and accurately communicated. Understanding the tradeoffs among drug product characteristics diagnosed consumers make--and how the tradeoffs could potentially differ from the tradeoffs made by physicians--will provide OPDP valuable insight into the relevance and impact of various product attributes and promotional claims on informed choices and treatment decisions. Gaining a better understanding of what information has the most meaning and impact for audiences informs OPDP's approach to ensuring that promotional communications are truthful, balanced, and accurately communicated.

(Comment 3) One comment expressed concern that results of the study possibly could inform potential guidance on patient-focused drug development.

(Response 3) The purpose of this research is to examine the tradeoffs that consumers and physicians make when considering product claims that may appear in promotional communications. The fact that FDA is conducting research does not create any requirements.

(Comment 4) One comment asked how adherence and patient preference claims would be included in drug product information, as the commenter does not believe there is currently a patient preference claim or adherence data in FDA-approved prescription drug information for any product in either of the two conditions proposed in this study.

(Response 4) Prescription drug promotion often includes information beyond what is contained in the FDA-approved prescription information for the product. The attributes that make up the "additional information about the drug" are example marketing claims that have been used in product promotion. We will test reasonable scenarios based on realistic examples.

(Comment 5) One comment suggested clarification of the sentence, "The treatment preferences of diagnosed consumers and treating physicians have been shown to be influenced by certain characteristics, such as the drug's perceived impact on quality of life, complexity of dosage regimens, mode of administration, cost to family and self, and marketing claims unrelated to medicinal properties (Refs. 1 to 5)" (87 FR 24313 at 24315). The comment asserts that it is inaccurate to state that "preferences" are influenced by the characteristics of alternatives, when it is actually "choice" that is a reflection of the characteristics or attributes.

(Response 5) We have revised the sentence in question, as suggested, to make it clear that treatment choices are influenced by these example characteristics. The revised sentence reads, "The treatment choices of diagnosed consumers and treating physicians have been shown to be influenced by certain characteristics, such as the drug's perceived impact on quality of life, complexity of dosage regimens, mode of administration, cost to family and self, and marketing claims unrelated to medicinal properties."

(Comment 6) Two comments asked for clarification on the guidelines that will be used to determine the attributes and levels in the experiment.

(Response 6) We selected attributes and attribute levels based on information gathered through: (1) a systematic literature review of preference elicitation studies targeted toward prescription pharmacological treatments for psoriasis or type 2 diabetes among diagnosed consumers or healthcare providers (HCPs) reported in peer-reviewed journal articles or book chapters published in English through the end of September 2020 and (2) semistructured, one-on-one interviews with physicians and diagnosed consumers conducted as part of the formative work for this project.

The systematic literature review focused on research examining preferences for attributes and characteristics of prescription drug products indicated for psoriasis and type 2 diabetes. The review addressed two research questions with an emphasis on informing our choice of elicitation method for the main study and identifying characteristics of prescription drug products relating

to risk, burden, adherence, and benefits that physicians and consumers who have been diagnosed with the target medical conditions consider when choosing among treatment options. After screening candidate articles against our eligibility criteria, we retained and extracted information from 30 articles related to psoriasis and 28 articles for type 2 diabetes that informed our choice of attributes and levels. Our aim with the one-on-one interviews was to better understand how physicians and diagnosed consumers navigate decision making related to prescription drug products and to verify that attributes identified through the systematic literature review corresponded with the characteristics that physicians and consumers care about when making prescription drug choices. In all, we conducted 35 interviews with physicians who treat psoriasis or type 2 diabetes and 70 interviews with consumers who self-reported that they have been diagnosed with one of the two chronic conditions ($n = 35$ per condition). We asked specific questions about attributes and attribute levels found in the literature review. We also used the interviews to elicit additional characteristics that may not have been represented in the literature.

(Comment 7) One comment suggests use of an opt-out (i.e., decline therapy) or status quo (i.e., no change) option in the questionnaires.

(Response 7) There can be benefits to including an "opt-out" or "status quo" option in choice experiments, depending on the goals of the research. For example, if one is interested in estimating treatment uptake, the inclusion of an "opt-out" option may be helpful. However, estimating treatment uptake is not a goal of this study, and we believe the limitations of including an "opt-out" or "status quo" option outweigh the benefits in this instance. One limitation is the potential for satisficing--participants choosing the "opt-out" or "status quo" option because it requires less effort than reflecting on the option that best aligns with their preferences (Ref. 11). Additionally, in the context of this study, the status quo will differ among participants, raising the issue of how to interpret findings from diagnosed consumers who choose that option.

(Comment 8) Two comments question the decision to employ a discrete choice experiment (DCE) method and the number of attributes chosen, with one comment noting that there are other methods that may allow for a higher number of attributes to be tested. One of the comments noted the existence of other DCE studies conducted in similar treatment populations and requested clarification about how this study would differ from prior research.

(Response 8) One of the goals of the systematic literature review we conducted as part of the formative work for this study was to examine methods that have been used to elicit consumer or HCP preferences regarding treatment options for psoriasis and type 2 diabetes. An overarching observation from the systematic literature review is that there is a gap in the literature for studies that directly compare treatment preferences of diagnosed consumers and HCPs. There is also a lack of studies that examine the relative importance of marketing claims versus other types of promotional claims. This study will help fill these gaps. A DCE was the most common methodology used in prior research, and it has clear advantages over other methods for the purposes of the proposed study. Perhaps the most relevant benefits of the method are the flexibility to efficiently estimate the overall utility of different treatment profiles, the relative importance of attributes, and the preference weights for specific attribute levels all within the same design (see Ref. 12 for an analysis that covers all three of these aspects). Moreover, tradeoffs that diagnosed consumers and HCPs are willing to make between attributes can be estimated from DCE data by calculating the marginal rate of substitution or the ratio of relative importance scores for pairs of attributes (Refs. 12 to 15).

In designing the DCE for this project, we aim to conduct subgroup analyses comparing these research populations. Generally, this requires using the same attributes and levels for both research populations, though some degree of latitude is required to tailor the wording of background information, questions, and stimuli to match the target audience (e.g., plain language for consumers, medical terminology when appropriate for HCPs).

For planning purposes and in order to establish target sample sizes, in the 60-day *Federal Register* notice for this study, we assumed a design with 5 attributes, 2 to 4 levels per attribute, 10 choice tasks per participant, and 2 options per task square. Our review revealed that these assumptions are well within the median design parameters used in prior studies.

We will include methodological details concerning the experimental design in the report of results. Finally, while the comment did not identify any specific ongoing research as overlapping, we note that in general, in any event, OPDP may conduct concurrent or overlapping studies on similar topics.

(Comment 9) One comment suggested use of an efficient design, including blocking, as a way to minimize the burden of collection on respondents.

(Response 9) We intend to use an efficient design to reduce the number of choice tasks and have noted it as a burden reduction strategy in the information collection submission to OMB.

(Comment 10) One comment asserted that internet panels are prone to selection bias and suggested the study address this potential limitation.

(Response 10) Participants in the proposed studies will be convenience samples rather than probability-based samples of diagnosed consumers and physicians. The strength of the experimental design used in this study lies in its internal validity, on which meaningful estimates of differences across manipulated attributes can be produced and generalized. This is a counterpoint to observational survey methodologies, where estimating population parameters is the primary focus of statistical analysis. The recruitment procedures in this study are not intended to meet criteria used in survey sampling, where each unit in the sampling frame has an equal probability of being selected to participate. In a representative, observational survey study, response rates are often used as a proxy measure for survey quality, with lower response rates indicating poorer quality. Nonresponse bias analysis is also commonly used to determine the potential for nonresponse sampling error in survey estimates. However, concerns about

sampling error do not generally apply to experimental designs, where the parameters of interest are under the control of the researcher--rather than being pre-established characteristics of the participants. Participants will be recruited through online panels, which include a diverse range of participants in regard to age, race/ethnicity, income, education, and employment. We also have proposed the use of soft quotas to further ensure that we will recruit a diverse sample. See Response 12 for a more detailed description of the panels to be used in this research.

(Comment 11) Two comments questioned the Agency's methods for ensuring it is selecting patients as study participants.

(Response 11) Our eligibility criteria involve a self-reported diagnosis of plaque psoriasis or type 2 diabetes, which appropriately reflects the audience for DTC promotion where a verified diagnosis is not a criterion. The screener includes a question (screening question 5 (S5)) that asks whether a doctor, nurse, or other health professional has ever told the respondent they had at least one of seven health conditions. Participants who do not select plaque psoriasis or type 2 diabetes will be flagged as ineligible for the study. The other conditions are included as response options to help disguise eligibility criteria from respondents as they complete the screener.

(Comment 12) One comment stated it is unclear how physicians will be recruited, and one comment asserted that how consumers will be identified is not mentioned.

(Response 12) For the pretests and main study, participants will be drawn from participant panels managed by Dynata. Dynata recruits panel members through a combination of email and online marketing and by invitation, with over 300 diverse online and offline affiliate partners and targeted website advertising. By using multiple recruitment methods, Dynata is able to recruit a diverse set of consumers and decision makers to participate in their panels and will ensure demographic diversity of participants' genders, ages, and education levels. Panel inclusion is by invitation only, and Dynata invites only pre-validated individuals with known characteristics to participate in the consumer panels. The physician sample for the pretest and main study will be drawn from Dynata's Healthcare Panel, which is a physician panel used

exclusively for healthcare research. Dynata's Healthcare Panel uses a multimode approach that combines email, fax, and direct mail to recruit HCPs to participate in online surveys. Additionally, Dynata purchases professional association and governmental databases to verify an HCP's practicing status. These verification resources include the Drug Enforcement Agency number (DEA#) and the American Medical Association Medical Education Number (ME#).

(Comment 13) One comment suggested that the samples should be prepared for heterogeneity of preference.

(Response 13) We agree that our modeling approach is to account for potential preference heterogeneity. At the design phase, we are intentionally setting up the study to allow us to compare preference weights between diagnosed consumers and physicians within each health condition. Additionally, we intend to analyze the data using several modeling approaches with other sources of preference heterogeneity in mind.

(Comment 14) One comment suggested the study collect respondents' demographic information, including race/ethnicity, income, geographical region, educational attainment, and healthcare system experiences, particularly negative experiences with an HCP due to their race; two comments suggested the study collect additional data on participants' baseline HbA1c status.

(Response 14) We will measure several demographic variables about respondents, including race/ethnicity, educational attainment, gender, age, geographical location, health literacy, and numeracy. We will also collect information about time since diagnosis, perceived severity of their health condition, and experience/familiarity with prescription drugs to treat the condition. Based on prior experience, we expect these variables to have a direct or indirect effect on our measures. See also Response 13 regarding preference heterogeneity (i.e., the extent to which tastes and preferences vary across participants and/or groups). We are avoiding requesting potentially sensitive personal information from respondents. Although we agree that information about consumers' A1C status could be useful for explaining preference heterogeneity that we may observe, collecting data at that level of personal detail is not

warranted given the goals of the research. Instead, we have included a less intrusive perceived severity measure.

(Comment 15) One comment requested clarification of the rationale for determining the study's sample size (800 consumers and 800 physicians). Another comment questioned whether the sample size per demographic may be insufficient to understand how these conditions affect different populations.

(Response 15) The proposed sample size in the two main studies is $n = 400$ participants for each subgroup of interest (diagnosed consumers and physicians), for a total combined $N = 1600$. For our power estimates, we assumed an experimental design with no less than 5 conjoint questions per participant ($t = 5$), 2 alternatives per question ($a = 2$), and 4 levels per attribute ($c = 4$). This implies a sample of 400 participants per subgroup per study.

(Comment 16) One comment asked that a Spanish-language version of the survey be included to ensure that the experiences of this population are included.

(Response 16) We are limiting the survey to the English language, as the majority of advertising for these products is disseminated in English at this time.

(Comment 17) One comment encouraged FDA to broadly and systematically disseminate all final results of completed research related to this topic.

(Response 17) The Agency anticipates disseminating the results of the study after the final analyses of the data are completed, reviewed, and cleared. The exact timing and nature of any such dissemination has not been determined but may include presentations at trade and academic conferences, publications, articles, and posting on FDA's website.

(Comment 18) One comment asserted that access to the choice tasks and proposed questions, including content-specific language and terms, would allow a more substantive review of the proposed research.

(Response 18) Our questionnaires were made available during the public comment process. Our full stimuli are under development during the PRA process. We do not make draft

stimuli public during this time because of concerns that this may contaminate our participant pool and compromise our research. In our research proposals, we describe the purpose of the study, the design, the population of interest, and the estimated burden.

(Comment 19) One comment suggested considering adding a "don't know" response option throughout the questionnaire, where appropriate.

(Response 19) We understand the value of providing such responses for items of a factual nature. The drawback to providing such response options to these questions, however, is that we may lose information by allowing respondents to choose an easy response instead of giving the item some thought. Research has demonstrated that providing "no opinion" options likely results in the loss of data without any corresponding increase in the quality of the data. Thus, we prefer not to add these options to the survey.

(Comment 20) One comment suggested revising S5 to read "are you currently being treated for the following conditions…"

(Response 20) The current wording of S5 is consistent with the eligibility criterion that consumers self-identify as having been diagnosed with plaque psoriasis or type 2 diabetes. We will maintain this wording.

(Comment 21) One comment noted that it is unclear what method will be used to achieve the literacy goal of screening question 11.

(Response 21) The programming note for question S11 indicates that participants would count toward the low health literacy quota if the numeral value assigned to their response is greater than or equal to 3, where 3 = "Sometimes," 4 = "Often," and 5 = "Always."

(Comment 22) Two comments expressed confusion about whether question A2 is measuring severity from the patient's or physician's perspective and recommended clarifying the question or replacing it.

(Response 22) We have revised question A2, as suggested, to clarify that we are asking about the perceived severity of the condition from the participant's perspective.

(Comment 23) One comment recommended rephrasing question A6 to specify "forms" rather than "types" and to clarify the difference between a prefilled pen and a syringe (diabetes questionnaire).

(Response 23) We have reworded question A6, replacing the term "types" with "forms." In the one-on-one interviews, none of the participants expressed confusion about the two terms.

(Comment 24) One comment recommended revising the patient profile in the physician survey to reflect that most patients are diagnosed with type 2 diabetes in their 50s or 60s.

(Response 24) We appreciate your recommendations concerning the realism of the patient profile. In consultation with a medical advisor, we have maintained the patient profile age of 57 years but have changed the diabetes duration in the patient profile from 14 years to 4 years to reflect more standard disease state information.

(Comment 25) One comment suggested adding context to the diabetes questionnaire instructions to reduce ambiguity and facilitate comparisons between the physician and consumer surveys. Specifically, the comment suggests adding more information to the consumer survey about the baseline and changed A1C levels in the introduction (Section B).

(Response 25) Section B introduces each attribute that will be varied in the DCE. The language in the Section B introduction in the physician and consumer questionnaires is tailored to the audience but has the same information about the A1C goal and point reductions that will be examined in the study, which will facilitate comparisons between the two samples. Section C provides the patient profile that will be used as the basis for the DCE. For physicians, the profile is for a hypothetical patient. For consumers, the instructions ask the participant to imagine their doctor recommends they try a prescription drug to help lower their A1C. The change in A1C levels used in the choice tasks for both consumers and physicians includes examples that are anchored to an A1C of 8.5.

(Comment 26) One comment suggested adding itch (pruritis) as an attribute.

(Response 26) In choosing and defining product attributes to include in the study, we selected characteristics based on evidence that they will impact choice. Itch relief didn't feature prominently in the results of our literature review or in the one-on-one interviews with consumers or physicians. In comparison, effectiveness at achieving skin clearance was an attribute in every DCE study included in our literature review, had the greatest relative importance in many of those studies, and was mentioned as an important consideration in open-ended comments and ranked among the three most important characteristics by most participants in our one-on-one interviews.

(Comment 27) One comment recommended adding more description, using both simple text and simple graphics, to the "serious side effects" to depict the chance of experiencing a serious side effect, and it recommended adding definitions for the additional attributes.

(Response 27) Rare but serious adverse reactions/side effects will be presented to participants as a single attribute but may be treated as a set of dichotomous attributes for study design and analysis purposes (e.g., each side effect will be either present or absent in a profile). Varying more than one factor at a time within an attribute makes it difficult to distinguish the effect of each factor separately.

The "additional information" attributes are essentially marketing claims; however, we have labeled the attribute "additional information about the drug" to avoid eliciting reactance from participants in response to the term "marketing." Marketing claims are not typically presented with definitions, so we do not provide definitions for the levels of this attribute.

(Comment 28) One comment suggested replacing "adherence" with "usage" in the consumer questionnaires and standardizing preference description across the patient and physician questionnaires.

(Response 28) We will assess participant comprehension of the term "adherence" during cognitive interviews, and we can make changes, if indicated.

Descriptions of the preference attribute are the same in the physician and consumer questionnaires within each health condition. The attributes for each health condition are designed to be relevant to that particular health condition. We do not intend to make formal comparisons between health conditions.

(Comment 29) One comment suggested revising questions B1 to B5 from "how important is it" to instead obtain information about prior experience with each attribute.

(Response 29) The purpose of questions B1 to B5 is to collect self-report ratings of how important each attribute is to participants, which we may use to validate the relative importance scores derived from the DCE. We derived these questions from similar questions included in Janssen et al. (Ref. 17), a study that was conducted to illustrate how DCE could be conducted when following International Society for Pharmacoeconomics and Outcomes Research (ISPOR) recommendations for good research practices.

(Comment 30) One comment asserted that most current diabetes drugs are not associated with heart disease and suggested removing that attribute and adding questions related to weight loss and potential cardiovascular benefits.

(Response 30) We agree that cardiovascular mortality is not an adverse reaction associated with most diabetes drugs; however, there is evidence of increased risk of cardiovascular mortality for some oral antidiabetic agents (e.g., sulfonylureas, thiazolidinediones, and dipeptidyl peptidase 4 inhibitors (Refs. 18 and 19); we are not examining use of insulin in this study). Our approach with the serious adverse reactions/side effects attribute is to present a range of category-appropriate adverse reactions that differ greatly in terms of severity. The reasoning is similar to that behind manipulating extremes in an experimental study in order to increase variance, even if the resulting attributes do not reflect what is typical for the category.

(Comment 31) One comment asserted that the planned data analysis and how data between consumers and physicians would be compared is unclear.

(Response 31) We will use a variety of statistical techniques to analyze the data, adapting our modeling approach to the specific research questions and observed characteristics of the data. A variety of modeling approaches can be used to estimate preference weights in choice-based conjoint studies (Ref. 14)--including conditional logit, mixed logit, Bayesian latent utility, and latent class conditional logistic regression models. The results of the statistical analysis will be used to: (1) identify which attributes of prescription drug products diagnosed consumers and physicians value most, (2) calculate the relative importance of attributes, (3) identify differences in preferences between the two subgroups (e.g., by including interaction terms in the model), and (4) determine how participants make tradeoffs among attributes to make treatment choices. We intend to examine responses within medical conditions. Where commonalities in survey questions exist, we may compare the consumer and physician responses. Details of our research questions are included as part of the information collection submission to OMB.

(Comment 32) One comment suggested that physicians review the patient survey during pretesting to ensure that the physician and patient surveys are aligned.

(Response 32) Although some wording may differ between the physician and consumer questionnaires to reflect the knowledge and expertise of each sample, we have endeavored to ensure that the concepts are equally represented in the questionnaires across samples. Additionally, we have solicited peer review feedback on the questionnaires from experts in the field. We will also conduct cognitive interviews and pretests to help identify areas where the materials are ambiguous or confusing for participants and make any necessary refinements.

(Comment 33) Three comments had questions about the purpose of the pretesting and the accuracy of the burden estimation for the pretesting, and one comment stated that the burden estimate seemed reasonable.

(Response 33) We will conduct both cognitive interviews and pretests. The burden chart reflects both the cognitive interviews and the pretesting. Qualitative, one-on-one cognitive testing will be used to help identify areas where the materials would benefit from refinements.

Additionally, up to two rounds of quantitative pretesting per study will be employed to evaluate the procedures and measures used in the main study. We will balance various factors that affect study completion time and limit the questionnaire to a mean of 20 minutes or less.

The way attribute levels are combined to form hypothetical choice options in a choice-based conjoint analysis, or DCE, are determined by the study's experimental design. Although the number of possible combinations is often too large for each participant to evaluate them all, we will generate a statistically efficient design that reduces the number of choice tasks participants must complete while maintaining sufficient balance and orthogonality for reliable parameter estimation.

(Comment 34) One comment referred to an abstract describing a DCE examining patients' preferences for newer second-line antihyperglycemic agents.

(Response 34) We appreciate bringing the abstract to our attention.

FDA estimates the burden of this collection of information as follows:

Table 1.--Estimated Annual Reporting Burden

Activity	No. of Respondents	No. of Responses per Respondent	Total Annual Responses	Average Burden per Response[1]	Total Hours
Cognitive Interview Screener, Consumers	150	1	150	0.08 (5 min)	12
Cognitive Interviews, Consumers	9	1	9	1	9
Pretest 1 Screener, Physicians[2]	95	1	95	0.08 (5 min)	8
Pretest 1 Screener, Consumers[3]	95	1	95	0.08 (5 min)	8
Physician Pretest 1	66	1	66	0.33 (20 min)	22
Consumer Pretest 1	66	1	66	0.33 (20 min)	22
Pretest 2 Screener, Physicians[2,3]	95	1	95	0.08 (5 min)	8
Pretest 2 Screener, Consumers[2,3]	95	1	95	0.08 (5 min)	8
Physician Pretest 2[2]	66	1	66	0.33 (20 min)	22
Consumer Pretest 2[2]	66	1	66	0.33 (20 min)	22
Physician Main Study Screener[2]	1,258	1	1,258	0.08 (5 min)	101
Physician Main Study	880	1	880	0.33 (20 min)	290
Consumer Main Study Screener[2]	1,258	1	1,258	0.08 (5 min)	101
Consumer Main Study	880	1	880	0.33	290

				(20 min)	
Total				5,079	923

[1] Burden estimates of less than 1 hour are expressed as a fraction of an hour in decimal format.
[2] Number of screener respondents assumes a 70 percent eligibility rate with targeted recruitment.
[3] Pretest 2 will be conducted only if changes to study materials are made in response to the findings of Pretest 1.

As with most online and mail surveys, it is always possible that some participants will be in the process of completing the survey when the target number is reached and that those surveys will be completed and received before the survey is closed out. To account for this, we have estimated approximately 10 percent overage for both samples in the pretest and main study.

II. References

The following references marked with an asterisk (*) are on display at the Dockets Management Staff (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852) and are available for viewing by interested persons between 9 a.m. and 4 p.m., Monday through Friday; they also are available electronically at https://www.regulations.gov. References without asterisks are not on public display at https://www.regulations.gov because they have copyright restriction. Some may be available at the website address, if listed. References without asterisks are available for viewing only at the Dockets Management Staff. FDA has verified the website addresses, as of the date this document publishes in the *Federal Register*, but websites are subject to change over time.

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