

COMMENT PREPARED AFTER THE TPSAC MEETING ON CAMEL SNUS

RJR failed to demonstrate that Camel Snus, as actually used by consumers, will significantly reduce harm to individuals or benefit population health. FDA should not issue an MRTP order allowing RJR to market Camel Snus with modified risk claims

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At the TPSAC meeting convened September 13-14, 2018, RJR failed to provide TPSAC with the scientific evidence necessary to support an MRTP order. In particular, RJR did not overcome problems in its MRTP application for Camel Snus because it failed to demonstrate that its proposed modified risk advertising claims and executions would ***both*** (1) significantly reduce the risk of disease to individuals and (2) benefit the health of the population as a whole, as required by law for the FDA to issue an MRTP order. ***Therefore, FDA should not issue an MRTP order for RJR's six Camel Snus products.***

- 1. Although all of RJR's proposed modified risk advertising claims are based on the premise that smokers will "switch completely" from cigarettes to Camel Snus, RJR failed to demonstrate that this use pattern happens as the product is *actually used* by consumers.**

Existing epidemiologic evidence, including RJR's own data, indicates that current combustible tobacco users are unlikely to switch completely to snus, but instead are more likely to follow a pattern of dual- or poly-use. A 2016 study (not cited in RJR's MRTPA) concluded

that complete switching to snus was rare for cigarette smokers, and 84% of snus users expected to be smoking in 12 months.¹ As we discuss in detail in our comment by Chaffee, et al, previously submitted to this docket,² RJR misrepresented data from the PATH study to support its conclusions, when in fact the data show that as actually used in real world settings, very few cigarette smokers switch completely to snus. (See Table 2, page 8 of Chaffee comment.)

Several observational studies of snus use in the US show that complete switching and smoking cessation have not been consumers' actual patterns of use.^{3, 4, 5, 6} Moreover, even RJR's own studies demonstrate that consumers will likely use Camel Snus in conjunction with other tobacco products, including RJR's sponsored study CSD0804, described in Section 3.5.2.1 of its MRTP application that showed that ***87% of Camel snus users used other tobacco products, and only 13% used Camel Snus exclusively.*** Further, RJR's reports derived from the RAI-funded National Tobacco Behavior Monitor and RJR's Consumer Brand Tracker Survey (Section 3.5.2.2.3 of the MRTP application) show that exclusive use of snus is a rare behavior, and ***only 7% of Camel Snus users were exclusive users.*** The Brand Tracker survey estimate was even lower, with only ***3.5% exclusive users.*** These findings by RJR are particularly relevant because, as noted above, its MRTP application presumes complete switching from cigarettes to snus.

¹ Biener L, Roman AM, Mc Inerney SA, Bolcic-Jankovic D, Hatsukami DK, Loukas A, O'Connor RJ, Romito L. Snus use and rejection in the USA. Tob Control. 2016 Jul;25(4):386-92.

² Chaffee BW, Vora M, Lempert LK et al., Clinical Trials and Observational Epidemiology Indicate that Allowing Snus to be Marketed with Modified Risk Claims is Unlikely to Confer Population Benefit and May Cause Harm by Depressing Smoking Cessation, Docket Number: FDA-2017-N-4678-0001, Comment Tracking Number: 1k2-9510-3515, Aug. 23, 2018.

³ Bahreinifar S, Sheon NM, Ling PM. Is snus the same as dip? Smokers' perceptions of new smokeless tobacco advertising. Tob Control. 2013 Mar;22(2):84-90.

⁴ Biener L, McCausland K, Curry L, Cullen J. Prevalence of trial of snus products among adult smokers. Am J Public Health. 2011 Oct;101(10):1874-6.

⁵ Popova L, Ling PM. Alternative tobacco product use and smoking cessation: a national study. Am J Public Health. 2013 May;103(5):923-30.

⁶ Schauer GL, Malarcher AM, Babb SD. Prevalence and correlates of switching to another tobacco product to quit smoking cigarettes. Nicotine Tob Res. 2015 May;17(5):622-7.

In their presentations at TPSAC, RJR's representatives Dr. Marano, Dr. Round, and Dr. Shiffman admitted that 50% of Camel Snus users are also cigarette users, but failed to acknowledge that RJR's own studies also demonstrate that another 30% of Camel Snus users are poly-users with cigarettes and other tobacco products, and another 8% use Camel Snus with tobacco products other than cigarettes, which means that ***88% of Camel Snus users are expected to use Camel Snus with other tobacco products.*** Moreover, these RJR representatives misleadingly stated that dual use is at worst a "transitional state" that does not add to the product's risk. Scientific evidence from independent, non-industry research (as well as RJR's own data) does not support these patently false statements. Cigarette smokers who add Camel Snus to their daily tobacco use patterns would obviously not diminish their exposure to dangerous toxicants, but would only increase that exposure. RJR ignored this undeniable additive effect.

Unfortunately, none of the specific questions FDA asked TPSAC to consider addressed this foundational point regarding dual use, and the ensuing discussion demonstrated that TPSAC's votes were not based on understanding the essential fact that few snus users actually switch completely from cigarettes to snus. Accounting for how Camel Snus is *actually used* by consumers is an essential part of the legal standard, and dual- or poly-use is the most likely actual use pattern. ***However, RJR's argument that Camel Snus will reduce risks in individuals and benefit the health of the population as a whole is based on the premise that individuals will switch completely to Camel Snus. RJR did not and could not demonstrate that individuals will switch completely to Camel Snus. Therefore, RJR did not meet either prong of the legal standard.***

2. Camel Snus users are exposed to greater levels of dangerous toxicants, including tobacco-specific nitrosamines and heavy metals and toxic flavors

As detailed in a previous comment we submitted to this docket,⁷ Camel Snus contain higher levels of the tobacco-specific nitrosamines NNN and NNK (linked to esophageal cancer and lung cancer) and the heavy metals cadmium and arsenic (also linked to cancers and cardiopulmonary disease) than cigarettes. Contrary to RJR's misleading statements at the TPSAC meeting, higher levels of these ingredients may, in fact, translate to higher exposure to these dangerous toxicants. Systemic exposure to tobacco toxicants is a function of the chemistry of the products, constituent delivery and bioavailability, and user characteristics or use patterns. In assessing potential health risks of tobacco products, the importance of these individual factors should not be minimized.

RJR's Dr. Borgerding also made misleading statements about the variability of the formulation of the six flavors of Camel Snus, dismissing the importance of the flavoring ingredients. Dismissing the different flavor formulations as mere changes in "some sweeteners," RJR failed to acknowledge that the constituents of different flavors are important because they not only impact the abuse liability of Camel Snus, but also because some flavors are toxic.

These misleading statements may have led TPSAC members to reach conclusions different from conclusions they would have reached had they been given more accurate scientific information. RJR did not meet the first prong of its statutory burden to demonstrate

⁷ St. Helen G, Chaffee B, Lempert L, et al. Reynolds' own data do not support their claim that because exclusive users of Camel Snus experience lower levels of exposure to some toxicants, they will reduce their risk of harm from lung cancer, oral cancer, respiratory disease, and heart disease, Docket number: FDA-2017-N-4678-0001, Comment Tracking Number: 1k2-9510-3zjn, Aug. 23, 2018.

that Camel Snus, as actually used, significantly reduces harm and the risk of tobacco-related disease to individual users.

3. Camel Snus would not further harm reduction goals

RJR did not provide sufficient evidence that Camel Snus, *as actually used by consumers*, would reduce harm to individuals or to population health. In his public comment in support of a Camel Snus MRTP order on September 14, Alex Clark, CEO of Consumer Advocates for Smoke Free Alternatives Association, stated that he used Camel Snus on public transportation when he is prohibited from smoking cigarettes. As discussed in our previously submitted comment,⁸ the PATH study confirms that evading smoking restrictions is a greater motivation for using snus than quitting smoking, with 80% of users saying they used snus at times or in places where smoking is not allowed, and only 37% thought snus would help people quit. *These stories from real people describing their actual use patterns provide even more evidence that in the real world, Camel Snus use would not help people quit smoking, and may actually suppress cessation by maintaining smokers' nicotine levels and addiction when smoking is not allowed.*

Section 911 and the MRTP process were created in the wake of the RICO case that found the major tobacco companies liable for more than 50 years of fraud and deception, in particular in their advertising, labeling, and false claims that some cigarettes were less harmful because they were “light” or “mild.” Section 911 restricts companies from making reduced harm claims in the absence of substantial scientific evidence demonstrating that those claims are true, and are intended to prevent deceptive labeling and advertising. RJR failed to demonstrate that Camel Snus reduces harms to individuals and failed to demonstrate an increased likelihood that current

⁸ Chaffee BW, Vora M, Lempert LK et al., Clinical Trials and Observational Epidemiology Indicate that Allowing Snus to be Marketed with Modified Risk Claims is Unlikely to Confer Population Benefit and May Cause Harm by Depressing Smoking Cessation, Docket Number: FDA-2017-N-4678-0001, Comment Tracking Number: 1k2-9510-3515, Aug. 23, 2018.

smokers will stop smoking and instead use Camel Snus exclusively. As evidenced from these examples of actual use, the predominant use pattern of Camel Snus is to use it concurrently with other tobacco products, especially when smoking is prohibited. ***This actual use pattern shows that the existence of Camel Snus and its proposed modified risk advertising does not benefit population health.***

- 4. The fact that RJR's MRTP application and statements at the TPSAC meeting failed to consider the impact of Camel Snus use on youth is more evidence that RJR failed to demonstrate that Camel Snus use would benefit the health of the population as a whole.**

TPSAC's hurried and incomplete discussion at the very end of its meeting failed to adequately address the impact of Camel Snus users by youth, adolescents, young adults, and other non-users. However, TCA Section 911(g)(4) and FDA's Guidance on MRTP applications make clear that the determination of whether a proposed modified risk product benefits the health of the population as a whole must consider the increased or decreased likelihood that non-users of tobacco products, including youth, will start using the product. As detailed in our previously submitted comments,^{9, 10} RJR did not consider or test the impact of its marketing claims on youth, did not consider that the flavored Camel Snus products are more likely to attract youth and adolescents to Camel Snus, and that youth who initiate smokeless tobacco use through

⁹ Halpern-Felsher B, Chaffee B, Ling P, et al., R.J. Reynolds Tobacco Company's Application for Six Camel SNUS Smokeless Tobacco Minimizes its Appeal to Adolescents and the Likelihood that Youth and Adolescents Will Initiate Smokeless Tobacco or Smokeless Tobacco with Other Products, Docket Number: FDA-2017-N-4678-0001, Comment Tracking Number: 1k2-9510-ujes, Aug. 23, 2018.

¹⁰ Popova L, Glantz SA, Lempert LK, et al., RJR consumer perceptions studies are poorly designed and fail to provide sufficient evidence to evaluate the effects the proposed modified risk advertisements on consumer comprehension and behavioral intentions, Docket Number: FDA-2017-N-4678-0001, Comment Tracking Number: 1k2-9510-2ciq, Aug. 23, 2018.

Camel Snus are at increased risk of subsequently smoking cigarettes (i.e., the gateway effect). RJR did not include information from studies with teens younger than 18, however evidence reported in independent scientific studies on currently marketed novel tobacco products shows that the introduction of novel products will attract adolescents into initiating use.¹¹ Further, studies indicate that youth are likely to misperceive the risks of Camel Snus, and Camel Snus marketing is likely to result in dual- or poly-use of Camel Snus with other tobacco products, especially among youth and young adults. *The omission of consideration of effects on youth is one more reason that RJR failed to meet its statutory burden to demonstrate that Camel Snus, as actually used by consumers, will benefit the health of the population as a whole.*

5. RJR failed to demonstrate that consumers understand the meaning of the phrase, “switch completely” or its importance in achieving the products’ purported benefits, and failed to provide the legally mandated consumer perception studies

TCA Section 911(h) requires RJR to demonstrate that the proposed advertising for Camel Snus enables the public to comprehend the information concerning modified risk and to understand the relative significance of that information. However, *TPSAC inaccurately reframed Question 3 proposed by FDA which sought to address the sufficiency of RJR’s MRTP application in meeting this legal mandate, and resulted in an incomplete discussion of*

¹¹ Walsh MM, Langer TJ, Kavanagh N., et al. Smokeless tobacco cessation cluster randomized trial with rural high school males: intervention interaction with baseline smoking. *Nicotine Tob Res.* 2010 Jun;12(6):543-50; Watkins SL, Glantz SA, Chaffee BW. Association of Noncigarette Tobacco Product Use with Future Cigarette Smoking Among Youth in the Population Assessment of Tobacco and Health (PATH) Study, 2013-2015. *JAMA Pediatr.* 2018 Feb 1;172(2):181-187; Ary DV, Lichtenstein E, Severson HH. Smokeless tobacco use among male adolescents: patterns, correlates, predictors, and the use of other drugs. *Prev Med.* 1987 May;16(3):385-401; McKelvey K, Ramos M, Roditis M et al., A Qualitative Analysis of Adolescents’ Appeal of Various Tobacco Products. In preparation.

this important issue. As detailed in our previously submitted comment,¹² the experimental design of RJR’s Consumer Comprehension and Persuasion Studies did not allow for testing of RJR’s claims, and therefore RJR failed to demonstrate that its marketing would effectively communicate the modified risk information in a way that consumers could understand. Also, contrary to the claims RJR made in its Executive Summary of the MRTPA, RJR’s studies show that their advertisements actually *increased* interest in trying Camel Snus among both smokers who are and who are not likely to quit. This means that RJR’s MRTP claims and advertisements may actually *depress cessation* and are likely to *increase harm*. Because RJR did not meet the requirements of section 911(h), it failed to meet its statutory burden of demonstrating that Camel Snus, as actually used by consumers, will benefit the health of the population as a whole.

6. The results of TPSAC’s votes on the questions posed by FDA show that RJR did not demonstrate with substantial scientific evidence that RJR met both prongs of the legal mandate

There can be little argument that hypothetical individuals who *completely quit smoking* cigarettes and exclusively use Camel Snus would reduce their risk of lung cancer and other respiratory diseases associated with cigarette smoke. So TPSAC’s 8 to 0 votes on Question 1a and 1c (**DISCUSS** the available scientific evidence and **VOTE** on the extent to which the available scientific evidence substantiates the following modified risk information in the applicant’s advertising: “Smokers who **switch completely** from cigarettes to Camel SNUS can significantly reduce their risk of...” a. lung cancer? ... c. respiratory disease? [emphasis in original]) were a foregone conclusion, especially because neither RJR nor TPSAC adequately

¹² Popova L, Glantz SA, Lempert LK, et al., RJR consumer perceptions studies are poorly designed and fail to provide sufficient evidence to evaluate the effects the proposed modified risk advertisements on consumer comprehension and behavioral intentions, Docket Number: FDA-2017-N-4678-0001, Comment Tracking Number: 1k2-9510-2ciq, Aug. 23, 2018.

addressed the important premise that reduced harms are dependent on complete switching, even though available scientific evidence demonstrates that exclusive use of Camel Snus is not the predominant use pattern. Regarding whether the scientific evidence presented by RJR substantiates the claims that Camel Snus, as actually used by consumers, reduces the risks of oral cancer and heart disease, 5 of 8 TPSAC members did not endorse these claims, and only 3 members voted yes.

TPSAC's discussion before and after these votes also revealed that the members had not appropriately considered the issues of *complete switching* and *actual use*, including youth use, which would likely have resulted in even fewer or no members voting yes. Moreover, as discussed above, RJR did not provide sufficient scientific evidence to demonstrate that consumers understood what the phrase "switch completely" means, or that they appropriately tested these advertising claims. Ex Officio and non-voting TPSAC participant Dr. Brian King from the CDC's Office on Smoking and Health pointed out that ***contrary to RJR's misleading statements, data on youth use is available in the PATH studies, and there may be more implications for youth once Camel Snus is heavily marketed.***

TPSAC's votes on Question 2 regarding the sufficiency of the scientific evidence substantiating RJR's modified risk advertising "statements that describe a reduction in harmful chemicals in Camel Snus vs. cigarettes" were similarly inconclusive and flawed. FDA only selected four excerpts from many statements made in RJR's three multi-page advertising executions and did not present the excerpts in the context of the actual advertising materials. Moreover, as described above, RJR failed to appropriately test consumers' understanding of the advertising materials, so RJR could not and did not present sufficient scientific evidence to support these claims.

Conclusion

RJR did not meet the statutory requirements for an MRTP order. RJR failed to demonstrate that Camel Snus, as actually used by consumers, will both significantly reduce risks to individuals and will also benefit the health of the population as a whole. Demonstrating **both** prongs of the legal mandate – reduction of individual harm and benefits to population health – are required before FDA may issue an MRTP order. This means that even if RJR presented sufficient scientific evidence to demonstrate that Camel Snus reduces the risk of lung cancer or other respiratory diseases, this would not be sufficient for an MRTP order absent a demonstration of benefits to the health of the population as a whole. Any evidence presented by RJR does not meet either prong of the standard if it does not take into consider how Camel Snus is actually used by consumers. TPSAC's votes and discussions did not support a recommendation that FDA issue an order allowing Camel Snus to be marketed with modified risk claims.

FDA should not issue MRTP orders to RJR for Camel Snus and should not allow Camel Snus to be marketed with any of the advertisements or claims proposed by RJR.