

No. 21-2883

**IN THE UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT**

LIQUID LABS LLC,

Petitioner,

v.

UNITED STATES FOOD & DRUG ADMINISTRATION,

Respondent.

On Petition for Review of a Final Marketing Denial Order
by the U.S. Food and Drug Administration

**BRIEF OF *AMICI CURIAE* MEDICAL AND PUBLIC
HEALTH GROUPS IN SUPPORT OF RESPONDENT**

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CORPORATE DISCLOSURE STATEMENT AND STATEMENT OF FINANCIAL INTEREST

Pursuant to Fed. R. App. P. 26.1(a) and Third Circuit L.A.R. 26.1, *amici curiae* American Academy of Family Physicians, American Academy of Pediatrics, American Cancer Society Cancer Action Network, American Heart Association, American Lung Association, American Medical Association, Campaign for Tobacco-Free Kids, Parents Against Vaping e-cigarettes, Pennsylvania Medical Society, and Truth Initiative (“medical and public health groups”) make the following disclosure:

1) For non-governmental corporate parties please list all parent corporations:

None/not applicable.

2) For non-governmental corporate parties please list all publicly held companies that hold 10% or more of the party’s stock:

None/not applicable.

3) If there is a publicly held corporation which is not a party to the proceeding before this Court but which has a financial interest in the outcome of the proceeding, please identify all such parties and specify the nature of the financial interest or interests:

None/not applicable.

4) In all bankruptcy appeals counsel for the debtor or trustee of the bankruptcy estate must list: 1) the debtor, if not identified in the case caption; 2) the members of the creditors' committee or the top 20 unsecured creditors; and, 3) any entity not named in the caption which is an active participant in the bankruptcy proceeding. If the debtor or trustee is not participating in the appeal this information must be provided by appellant.

None/not applicable.

Dated: March 23, 2022

/s/ William B. Schultz
William B. Schultz
Attorney for *Amici Curiae*

TABLE OF CONTENTS

STATEMENT OF INTEREST OF <i>AMICI CURIAE</i>	1
STATEMENT OF COMPLIANCE WITH RULE 29(a)	3
INTRODUCTION AND SUMMARY OF ARGUMENT	3
ARGUMENT	5
I. The MDO Was Not Arbitrary and Capricious.	5
A. Given the overwhelming evidence of youth attraction to flavored e-cigarettes, FDA reasonably denied Petitioner's applications for failure to provide robust evidence that its flavored e-liquids help smokers stop smoking more effectively than unflavored products.	5
1. FDA found "robust and consistent" evidence demonstrating that flavored e-cigarettes, including open-system products, are particularly attractive to youth.	6
2. As FDA found, flavored e-cigarette products, including Petitioner's flavored e-liquids, pose a direct threat of addiction and other health harms to young people.	11
3. FDA acted reasonably in requiring robust evidence showing that flavored e-cigarettes help smokers stop smoking more effectively than tobacco-flavored products.	13
B. FDA's determination that access and marketing restrictions are insufficient to reduce youth initiation of flavored products was reasonable.	15
C. FDA considered the public health impact of the MDO.	19
II. FDA's Requirement of Reliable Evidence that Petitioner's Flavored Products Confer a Greater Benefit in Helping Smokers to Stop Smoking than Tobacco-Flavored Products Is Well Within the Agency's Statutory Authority.	21
A. FDA's evidentiary requirement is at the core of the TCA's public health standard.	21
B. FDA did not evaluate Petitioner's applications under the modified risk tobacco product or drug approval standards.	22

III. FDA's Requirement of Strong Evidence that Petitioner's Flavored Products Confer a Greater Benefit in Helping Smokers Stop Smoking than Tobacco-Flavored Products Is Not a Product Standard or an Agency Decision Requiring Rulemaking.....	24
IV. Petitioner's Requested Relief Would Be Contrary to the TCA and Harm Public Health.....	27
CONCLUSION.....	29
CERTIFICATE OF ADMISSION TO THE BAR	30
CERTIFICATE OF COMPLIANCE.....	31
CERTIFICATE OF CONFERENCE	32
CERTIFICATE OF SERVICE	33

TABLE OF AUTHORITIES

Cases

<i>American Academy of Pediatrics v. FDA</i> , 379 F. Supp. 3d 461 (D. Md. 2019); 399 F. Supp. 3d 479 (D. Md. 2019), <i>appeal dismissed sub nom. In re Cigar Ass'n of Am.</i> , 812 F. App'x 128 (4th Cir. 2020)	2
<i>American Academy of Pediatrics v. FDA</i> , 379 F. Supp. 3d 461 (D. Md. 2019)	27-28
<i>Breeze Smoke, LLC v. FDA</i> , 142 S. Ct. 638 (2021)	8
<i>Breeze Smoke, LLC v. FDA</i> , 18 F.4th 499 (6th Cir. 2021).....	8
<i>N.L.R.B. v. Bell Aerospace Co. Div. of Textron, Inc.</i> , 416 U.S. 267 (1974).....	26
<i>N.L.R.B. v. Wyman-Gordon Co.</i> , 394 U.S. 759, 765 (1969)	26
<i>Nicopure Labs, LLC v. FDA</i> , 944 F.3d 267 (D.C. Cir. 2019)	11
<i>U.S. Smokeless Tobacco Mfg. Co. LLC v. City of New York</i> , 708 F.3d 428 (2d Cir. 2013).....	25-26

Statutes

Family Smoking Prevention and Tobacco Control Act, Pub. L. 111-31, 123 Stat. 1776.....	4
21 U.S.C. § 355(b)(1)(A).....	24
21 U.S.C. § 387g(a)(1)(A)	25
21 U.S.C. § 387g(a)(3)(A)	24, 25
21 U.S.C. § 387g(a)(4)(B)	25
21 U.S.C. § 387j(c)(2)	24-25, 27, 28

21 U.S.C. § 387j(c)(4)	5, 21, 23
21 U.S.C. § 387k(b)(2)(i)	23

Other Authorities

Andrea S. Gentzke et al., <i>Tobacco Product Use and Associated Factors Among Middle and High School Students – National Youth Tobacco Survey, United States, 2021</i> , 71 MORBIDITY & MORTALITY WKLY. REP. 1 (2022)	16
April Roeseler et al., <i>Assessment of Underage Sales Violations in Tobacco Stores and Vape Shops</i> , 173 JAMA PEDIATRICS 795 (2019).....	16
Eunice Park-Lee et al., <i>Notes from the Field: E-Cigarette Use Among Middle and High School Students – National Youth Tobacco Survey, United States, 2021</i> , 70 MORBIDITY & MORTALITY WKLY. REP. 1387 (2021)	7, 8, 9, 12
Fatma Romeh M. Ali et al., <i>Evaluation of Statewide Restrictions on Flavored e-Cigarette Sales in the US From 2014 to 2020</i> , 5 JAMA NETWORK OPEN 1 (2022).....	20
FDA, <i>Modifications to Compliance Policy for Certain Deemed Tobacco Products; Draft Guidance for Industry; Availability</i> , 84 Fed. Reg. 9,345 (Mar. 14, 2019).....	17
Samane Zare et al., <i>A systematic review of consumer preference for e-cigarette attributes: Flavor, nicotine strength, and type</i> , 13 PLoS ONE 1 (2018)	14
Samir S. Soneji et al., <i>Use of Flavored E-Cigarettes Among Adolescents, Young Adults, and Older Adults: Findings From the Population Assessment for Tobacco and Health Study</i> , 134 PUB. HEALTH REP. 282 (2019).....	20

Amici medical, public health, and community organizations submit this brief in support of Respondent United States Food and Drug Administration (“FDA”) and urge the Court to uphold the Marketing Denial Order (“MDO”) issued to Petitioner Liquid Labs LLC. By issuing an MDO for Petitioner’s flavored e-liquids—including Maui Blast, OG Island Fusion, OG Krunch, and OG Tropical Blue, JA6—FDA has acted to protect public health by removing from the market flavored products that have fueled an epidemic of youth usage of highly-addictive and harmful e-cigarettes, with no demonstrated countervailing benefit in helping adult smokers to stop smoking cigarettes. This brief is filed with the consent of the parties.

STATEMENT OF INTEREST OF *AMICI CURIAE*

Amici are the following national medical, public health, and community organizations: American Academy of Family Physicians, American Academy of Pediatrics, American Cancer Society Cancer Action Network, American Heart Association, American Lung Association, American Medical Association, Campaign for Tobacco-Free Kids, Parents Against Vaping e-cigarettes, Pennsylvania Medical Society, and Truth Initiative. From physicians who counsel their young patients and their parents about the hazards of tobacco use, to organizations with formal programs to urge users to quit, to groups representing parents and families struggling to free young people from nicotine addiction, each of these organizations works on a daily basis to reduce the devastating health harms

of tobacco products, including electronic nicotine delivery system (“ENDS” or “e-cigarette”) products and the e-liquids used in those products.¹ Accordingly, *amici* have a direct and immediate interest in ensuring that Petitioner’s highly-addictive and youth-appealing flavored e-liquids not be permitted on the market, which can only be assured by upholding the MDO.

Amici also have a special interest in this case because many of the *amici* were plaintiffs in *American Academy of Pediatrics v. FDA*, in which they obtained a federal court order: (1) establishing new deadlines for the required submission of premarket tobacco product applications (“PMTAs” or “applications”) for e-cigarette products, and (2) limiting the time period that e-cigarettes may remain on the market without the required premarket orders. 379 F. Supp. 3d 461 (D. Md. 2019); 399 F. Supp. 3d 479 (D. Md. 2019), *appeal dismissed sub nom. In re Cigar Ass’n of Am.*, 812 F. App’x 128 (4th Cir. 2020). *Amici* therefore have a strong interest in ensuring that the premarket review process functions to protect the public health by removing from the market flavored e-cigarette products, like Petitioner’s e-liquids, that threaten the health and well-being of young people without sufficient countervailing evidence of any benefit to adult cigarette smokers.

¹ This brief uses the terms “e-cigarette” and “ENDS” interchangeably.

STATEMENT OF COMPLIANCE WITH RULE 29(a)

Amici affirm that no party’s counsel authored this brief, neither the parties nor their counsel contributed money intended to fund preparing or submitting this brief, and no person—other than *amici*, their members, or their counsel—contributed money that was intended to fund preparing or submitting this brief.

INTRODUCTION AND SUMMARY OF ARGUMENT

Petitioner manufactures and sells nicotine-containing flavored e-liquids (Petr’s Br. 10-11), a highly addictive and harmful product that has consistently been shown to appeal to youth. FDA denied Petitioner’s applications to market its flavored e-liquids because the applications lacked sufficient evidence that the flavored products are more effective than unflavored (i.e., tobacco-flavored) products in helping adult smokers stop smoking cigarettes, and therefore did not demonstrate any benefits that outweigh the known risks to youth posed by these flavored products. JA10.

I.A. In light of the mountain of evidence of youth attraction to flavored e-cigarettes, and the addictiveness and health harms to young people from those products—including products, like Petitioner’s e-liquids, used in open-system e-cigarettes—it was both reasonable and appropriate for FDA to require Petitioner to submit, in support of its marketing applications, robust, product-specific evidence of the benefit of its products compared to tobacco-flavored products in aiding smokers

to stop smoking. It was not arbitrary and capricious for FDA to issue an MDO based on Petitioner’s failure to provide such evidence.

I.B. It also was not arbitrary and capricious for FDA to conclude that youth access and marketing restrictions would be insufficient to reduce the risk of youth initiation of Petitioner’s products given: (1) FDA’s own experience with these types of restrictions; and (2) other real-world data showing that, with respect to flavored e-cigarettes, these restrictions are inherently inadequate to prevent youth usage of such products, given their intense appeal to young people.

I.C. Moreover, contrary to Petitioner’s assertion, FDA considered the public health consequences of its decision to deny authorization to Petitioner’s flavored e-liquids, including the impact on adult former smokers.

II. There is no merit to Petitioner’s argument that FDA lacks the statutory authority to require strong evidence that Petitioner’s flavored products confer a greater benefit in helping cigarette smokers stop smoking than tobacco-flavored products. Such a requirement is at the core of the public health standard found in the Federal Food, Drug and Cosmetic Act (“FFDCA”), as amended by the Family Smoking Prevention and Tobacco Control Act, Pub. L. 111-31, 123 Stat. 1776 (“TCA”). It does not improperly import, into the premarket review of new tobacco products, either the standards for modified risk tobacco product authorization under the TCA or for new drug approval under the FFDCA.

III. FDA was not required to use notice-and-comment rulemaking to require reliable evidence that Petitioner’s flavored products confer a greater benefit than tobacco-flavored products in helping smokers stop smoking.

IV. Finally, having enjoyed a lengthy period of being permitted to market its products without the order required by statute, Petitioner now asks the Court to order FDA to allow its products to remain on the market for an additional period while it conducts the studies necessary to demonstrate a public health benefit from its flavored products. Petitioner’s requested relief, if granted, would be inconsistent with the TCA and would harm public health.

ARGUMENT

I. The MDO Was Not Arbitrary and Capricious.

A. Given the overwhelming evidence of youth attraction to flavored e-cigarettes, FDA reasonably denied Petitioner’s applications for failure to provide robust evidence that its flavored e-liquids help smokers stop smoking more effectively than unflavored products.

In determining if the marketing of an e-cigarette is “appropriate for the protection of the public health”—the standard for a marketing order under the TCA—FDA must weigh two factors: (1) the likelihood that the product will help existing tobacco users stop using tobacco products, and (2) the likelihood that the product will lead non-tobacco users, including youth, to begin using such products. 21 U.S.C. § 387j(c)(4). Applying this framework to e-cigarettes, FDA found the evidence overwhelming that flavors—across all device types—appeal to youth more

than tobacco-flavored products. JA68-69. Given this unequivocal evidence, it was entirely reasonable, and certainly not arbitrary and capricious, for FDA to require Petitioner to submit “the strongest types of evidence” demonstrating that, compared to tobacco-flavored products, its flavored products benefit smokers by helping them to stop smoking cigarettes and to issue an MDO based on Petitioner’s failure to furnish such evidence. JA64.

The impact of a product on youth initiation is particularly critical because, as FDA noted in its Technical Project Lead Review (“TPL Review”) of Petitioner’s products, “use of tobacco products, no matter what type, is almost always started and established during adolescence when the developing brain is most vulnerable to nicotine addiction.” JA66. Whereas “almost 90 percent of adult daily smokers started smoking by the age of 18...youth and young adults who reach the age of 26 without ever starting to use cigarettes will most likely never become a daily smoker.” JA66-67. As FDA concluded, “[b]ecause of the lifelong implications of nicotine dependence that can be established in youth, preventing tobacco use initiation in young people is a central priority for protecting population health.” JA67.

1. **FDA found “robust and consistent” evidence demonstrating that flavored e-cigarettes, including open-system products, are particularly attractive to youth.**

As FDA explained in its TPL Review, e-cigarettes are the most popular tobacco product among youth, with more than 3.6 million young people reporting

current use in 2020, according to the National Youth Tobacco Survey (“NYTS”).

Id. Nearly one in five (19.6%) U.S. high school students were current e-cigarette users in 2020—about the same level as in 2018 when the U.S. Surgeon General first declared youth e-cigarette use an “epidemic.” JA66-67.²

Flavors are driving this youth vaping epidemic. *See* JA67 (“The evidence shows that the availability of a broad range of flavors is one of the primary reasons for the popularity of ENDS among youth.”). “[T]he flavoring in tobacco products (including ENDS) make them more palatable for novice youth and young adults, which can lead to initiation, more frequent and repeated use, and eventually established regular use.” JA68. In 2020, 84.7% of high school e-cigarette users reported using a flavored product. JA67. And according to data from the federal government, over 93% of youth users reported that their first e-cigarette product was

² Since the time FDA issued the challenged MDO, the 2021 NYTS data has become available. *See* Eunice Park-Lee et al., *Notes from the Field: E-Cigarette Use Among Middle and High School Students – National Youth Tobacco Survey, United States, 2021*, 70 MORBIDITY & MORTALITY WKLY. REP. 1387 (2021), <https://www.cdc.gov/mmwr/volumes/70/wr/pdfs/mm7039a4-H.pdf>. Even during the midst of the COVID-19 pandemic, over 2 million high school and middle school students reported current e-cigarette use. *Id.* at 1387. The Centers for Disease Control and Prevention has cautioned against comparing this data to previous survey years due to methodology changes, *id.*—a warning Petitioner disregards. Petr’s Br. 15. Whereas previous years’ surveys were conducted entirely in-school, the 2021 survey included both in-school and at-home responses; students who completed surveys in school reported higher e-cigarette use, suggesting that rates may have been much higher had the survey been conducted entirely in schools as with previous surveys. Park-Lee et al., *supra* note 2, at 1387-89.

flavored and 71% of current youth e-cigarette users reported using e-cigarettes “because they come in flavors I like.” JA67-68. As the Sixth Circuit recently found in denying an emergency stay of an MDO in a similar case, “[f]lavored ENDS products especially appeal to children.” *Breeze Smoke, LLC v. FDA*, 18 F.4th 499, 505 (6th Cir. 2021).³

Despite the robust evidence establishing the youth appeal of flavored ENDS, Petitioner contends that FDA’s risk assessment regarding youth usage was directed to other types of ENDS devices and does not apply to the bottled e-liquids intended for use with open-system devices that Petitioner manufactures and sells. Petr.’s Br. 45-48. Contrary to Petitioner’s assertion, FDA’s findings regarding the risk to youth posed by flavored ENDS apply in full force to open-system ENDS products, which use flavored e-liquids like those sold by Petitioner. As FDA found, “the role of flavor is consistent” across different device types. JA68. Moreover, open-system products remain popular among youth. Smok and Suorin, for example, are open-system devices and are currently among the most popular e-cigarette devices used by youth.⁴ Smok is the preferred brand of nearly one in ten (9.6%) high school e-cigarette users, and has surpassed JUUL in popularity.⁵

³ The Supreme Court denied a stay of the MDO on December 10, 2021. *Breeze Smoke, LLC v. FDA*, 142 S. Ct. 638 (2021).

⁴ See Park-Lee et al., *supra* note 2, at 1388 tbl.

⁵ *Id.*

Petitioner misleadingly claims that according to the 2021 NYTS, “only 9% of [youth e-cigarette users] reported using a tank system device compatible with bottled e-liquids.” Petr’s Br. 15. Petitioner, however, fails to mention that an additional 28.7% of youth e-cigarette users (roughly 570,000 students) reported using “Prefilled or refillable pods or cartridges,” which include popular refillable open-system products like Smok and Suorin that can use Petitioner’s e-liquids.⁶ Thus, the true percentage of youth e-cigarette users who report using open-system products is necessarily far greater than the 9% figure Petitioner cites, which itself still translates to 180,000 students.

Petitioner also points to a 2019 quote from then-FDA Commissioner Gottlieb to portray open-system devices as large and unwieldy—and therefore, having little youth-appeal. Petr’s Br. 13. However, these products have evolved dramatically, and many current iterations bear little resemblance to the products Commissioner Gottlieb called “big open-tank contraptions.” *Id.* For example, the sleek, easy-to-conceal Smok and Suorin devices pictured below can be used to consume Petitioner’s e-liquids. For reference, the Smok devices below weigh less than 0.2 pounds and measure roughly 3.7 inches tall, 1.2 inches wide, and 0.75 inches deep.⁷

⁶ Park-Lee et al., *supra* note 2, at 1388 tbl.

⁷ *Nord Kit*, SMOK, https://www.smoktech.com/product/pod_mod/nord-kit (last visited Mar. 22, 2022).



Figure 1: Suorin Drop Rainbow Chrome open-system ENDS device.⁸



Figure 2: Smok Nord open-system ENDS devices.⁹

Petitioner also ignores the fact that e-cigarette use by young people was a serious problem before closed-system cartridge-based products began to dominate the youth market in 2017; indeed, youth e-cigarette prevalence reached 16% in 2015. *See JA94.* More fundamentally, the salient point is not whether a particular kind or brand of flavored e-cigarette device or e-liquid is popular among youth at a specific point in time—FDA found that youth preference for particular types and brands of e-cigarettes is “likely fluid and affected by the marketplace, that is, the options, especially flavors, that are available for consumers to choose from.” JA69. Rather, the critical fact is that youth preference for flavors is *not* fluid. The “published

⁸ *Suorin Drop Rainbow Chrome – Pod System Device with Cartridge Kit*, SUORIN USA, <https://www.suorinusa.com/collections/suorin-drop/products/suorin-drop-rainbow-chrome> (last visited Mar. 22, 2022).

⁹ *Nord Kit*, *supra* note 7.

literature” showing “the substantial appeal to youth of flavored ENDS...is robust and consistent” and this youth preference for flavored products “is consistently demonstrated across large, national surveys and longitudinal cohort studies.” JA68. It is undeniable that Petitioner’s products have the central feature—flavors—that makes e-cigarettes attractive to youth.

2. As FDA found, flavored e-cigarette products, including Petitioner’s flavored e-liquids, pose a direct threat of addiction and other health harms to young people.

Petitioner’s e-liquids contain nicotine, Petr’s Br. 10-11, which is “among the most addictive substances used by humans.” *Nicopure Labs, LLC v. FDA*, 944 F.3d 267, 270 (D.C. Cir. 2019). In its TPL Review, FDA noted the factors making “[y]outh and young adult brains . . . more vulnerable to nicotine’s effect than the adult brain due to ongoing neural development.” JA69. FDA found that the high prevalence of youth e-cigarette use was increasing nicotine dependence among young people. *Id.* In 2019, as FDA noted, an estimated 30.4% of middle and high school e-cigarette users reported frequent use (i.e., use on 20 or more of the previous 30 days), and even more alarming, 21.4% of high school users and 8.8% of middle school users reported *daily* use. *Id.* Frequent and daily use prevalence among high school students were even higher in both 2020 (JA135) and 2021, with 43.6% of

high school e-cigarette users (roughly 750,000 students) reporting frequent use and 27.6% (roughly 470,000 students) reporting daily use in 2021.¹⁰

In addition to the risk of addiction, FDA found that youth exposure to nicotine “can induce short and long-term deficits in attention, learning, and memory.” JA69. FDA cited other health harms from e-cigarettes as well, including “associations between ENDS use and self-reported history of asthma, chronic bronchitis, emphysema, or chronic obstructive pulmonary disease with increased ENDS use (i.e., daily use) relating to increased odds of disease.” JA70.

FDA also noted the data documenting a risk of progression from e-cigarettes to other tobacco products. JA69-70. In its TPL Review, FDA cited a “systematic review and meta-analysis that summarized nine prospective cohort studies” finding “significantly higher odds of smoking initiation . . . and past 30-day combusted cigarette use . . . among youth who had used ENDS as compared to youth who had not....” *Id.* A 2018 report by the National Academies of Sciences, Engineering, and Medicine, cited in the TPL Review, found “substantial evidence that ENDS use increases [the] risk of ever using combusted tobacco cigarettes among youth and young adults.” JA70. Thus, the threat of flavored e-cigarettes is not just a short-term health threat; it also is a threat to a young person’s future health by increasing

¹⁰ Park-Lee et al., *supra* note 2, at 1388 tbl.

the risk of progression to a lifetime of addiction to even more hazardous tobacco products.

3. FDA acted reasonably in requiring robust evidence showing that flavored e-cigarettes help smokers stop smoking more effectively than tobacco-flavored products.

Precisely because the evidence that flavored tobacco products appeal to youth is so “robust and consistent,” JA68, it was entirely reasonable, and certainly not arbitrary and capricious, for FDA to require similarly “robust and reliable” evidence showing that Petitioner’s flavored e-cigarettes help smokers stop smoking more effectively than tobacco-flavored products, and that such a benefit is “substantial enough to overcome the significant risk of youth uptake and use posed by the flavored ENDS product.” JA71-72. Both the publicly available evidence of such benefits to adult smokers, as well as the data submitted by Petitioner, fall woefully short.

FDA found that “in contrast to the evidence related to youth initiation—which shows clear and consistent patterns of real-world use that support strong conclusions—the evidence regarding the role of flavors in promoting switching among adult smokers is far from conclusive.” JA72. For example, a systematic review that examined consumer preference for various e-cigarette attributes found “inconclusive evidence” as to whether flavored e-cigarettes assisted smokers to stop

smoking.¹¹ As FDA concluded, “the literature does not establish that flavors differentially promote switching amongst ENDS users in general.” JA72-73. Thus, it was both reasonable and appropriate for FDA to require Petitioner to demonstrate the effectiveness of its flavored products in helping smokers to stop smoking through randomized controlled trials, longitudinal cohort studies, or other similarly rigorous studies.

Instead of submitting any such studies, Petitioner offered (1) “an abuse liability study” comparing its flavored products to cigarettes and a nicotine replacement therapy, (2) a “cross-sectional perceptions and intention study evaluating ‘likelihood of use’ in current smokers, current ENDS users, former tobacco users and ‘never users,’” (3) a model that purports to show the population-level benefits that would result if all cigarette users switched to ENDS products, and (4) non-clinical analyses, including toxicology and allergenicity analyses, of Petitioner’s products. Petr’s Br. 20. Petitioner, however, did not even attempt to compare flavored ENDS to tobacco-flavored ENDS in any respect—let alone their capacity to help smokers quit smoking cigarettes. Instead, Petitioner compared its products (or ENDS products generally) to combustible cigarettes and, in one case, a

¹¹ Samane Zare et al., *A systematic review of consumer preference for e-cigarette attributes: Flavor, nicotine strength, and type*, 13 PLoS ONE 1, 12 (2018), <https://pubmed.ncbi.nlm.nih.gov/29543907/>.

nicotine replacement therapy. Petitioner presented no studies even purporting to establish that flavored products are more effective than tobacco-flavored products in helping smokers to stop smoking.

B. FDA's determination that access and marketing restrictions are insufficient to reduce youth initiation of flavored products was reasonable.

Petitioner argues that FDA failed to consider its marketing plan. Petr's Br. 42-45. As is apparent from the TPL Review, FDA gave due consideration to the role of access and marketing restrictions on youth usage of e-cigarettes and, based on the agency's experience with those restrictions and other real-world data, reasonably concluded that they are, by their nature, insufficient to prevent youth usage of flavored and highly-addictive products that are so intensely appealing to young consumers. *See* JA72 n.xix. While access and marketing restrictions are important and indeed necessary to support a PMTA, as FDA has emphasized time and again, *see* Petr's Br. 42-43, they are not sufficient when it comes to flavored e-cigarettes.

The specific measures proposed by Petitioner are plainly insufficient to prevent youth access to its flavored e-liquids. For example, Petitioner claims that youth access is limited because it "is in the process of...working with its distributor, retailer and wholesaler customers to ensure that its Vapor Products are only sold in adult-only (21+) retailers (e.g., vape shops), and not in any outlets that permit entry

by Minors (e.g., convenience stores, gas stations, grocery stores).” JA322; *see also* Petr’s Br. 12, 21. But Petitioner’s assertion ignores the fact that more youth report buying e-cigarettes from vape or tobacco shops (22.2%) than from gas stations or convenience stores (17.7%), according to the 2021 NYTS.¹² A 2019 study also found that in California, e-cigarette sales to minors violations are significantly higher in tobacco and vape shops than in any other type of retailer, with 44.7% selling to underage buyers.¹³

There also is substantial reason to doubt that Petitioner has implemented the restrictions outlined in its plan. For example, Petitioner claims that it “age-gate[s] all social media accounts...to 21 and over if permitted by the platform.” JA330. However, someone who is not even logged into a Twitter account,¹⁴ and therefore

¹² Andrea S. Gentzke et al., *Tobacco Product Use and Associated Factors Among Middle and High School Students – National Youth Tobacco Survey, United States, 2021*, 71 MORBIDITY & MORTALITY WKLY. REP. 1, 23 tbl.7 (2022), <https://www.cdc.gov/mmwr/volumes/71/ss/pdfs/ss7105a1-H.pdf>.

¹³ April Roeseler et al., *Assessment of Underage Sales Violations in Tobacco Stores and Vape Shops*, 173 JAMA PEDIATRICS 795, 796 (2019), <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2735684>.

¹⁴ Twitter allows age-gating. *See About age screening on Twitter*, TWITTER, <https://help.twitter.com/en/safety-and-security/age-verification> (last visited Mar. 11, 2022).

has not been asked to verify their age, is able to view Petitioner’s Twitter page, which includes an advertisement for a “Birthday Shake” e-liquid.¹⁵

The core problem is that youth access and marketing restrictions are insufficient to protect youth from the inherent hazards of these flavored products. FDA’s experience confirms this. In March 2019, in response to the youth vaping epidemic, FDA issued Draft Guidance¹⁶ which “proposed to focus its enforcement priorities of flavored ENDS products on how the product was sold....” JA104 (describing 2019 Draft Guidance). However, in 2020, FDA—armed with more data—announced in its Final Guidance that these access restrictions had been insufficient to protect youth from flavored e-cigarettes. “The reality,” FDA found, “is that youth have continued access to these [e-cigarette] products in the face of legal prohibitions and even after voluntary actions by some manufacturers.” *Id.* “[A]fter considering...comments, the public health threats, and the new evidence...FDA determined that focusing on how the product was sold would not appropriately address youth use of the products that are most popular among youth....” *Id.* Petitioner cites the provision in its marketing plan that requires

¹⁵ KeepIt100 (@vapekeepit100), TWITTER, <https://twitter.com/vapekeepit100> (last visited Mar. 22, 2022). “Keep It 100” is the brand name of Petitioner’s products. Petr’s Br. 10.

¹⁶ FDA, *Modifications to Compliance Policy for Certain Deemed Tobacco Products; Draft Guidance for Industry; Availability*, 84 Fed. Reg. 9,345 (Mar. 14, 2019), <https://www.govinfo.gov/content/pkg/FR-2019-03-14/pdf/2019-04765.pdf>.

distributors to abide by the existing legal requirements for age verification of online sales, Petr's Br. 35, but it is precisely those legal requirements that FDA has previously determined, based on its experience, are insufficient in protecting against youth usage of flavored products. JA127 ("FDA believes that age verification alone is not sufficient to address this issue, given...that youth use of ENDS products continues to increase.").

FDA's conclusion—in both its 2020 Guidance and TPL Review—is also supported by data indicating that youth obtain e-cigarettes with relative ease. According to the 2021 Monitoring the Future Survey, 48.5% of 10th grade students reported that it would be easy to get e-liquids and 54.6% reported that it would be easy to get vaping devices.¹⁷ As FDA recognized in its 2020 Guidance (JA128, JA129), many youth e-cigarette users obtain e-cigarettes through social sources, such as older friends or relatives—an avenue of access unlikely to be significantly affected by youth access restrictions.

Given the alarming level of continued youth usage of flavored e-cigarettes, FDA reasonably concluded that "we are not aware of access restrictions that, to date, have been successful in sufficiently decreasing the ability of youth to obtain and use ENDS." JA72 n.xix. It was similarly appropriate for FDA to rely on its own

¹⁷ *Table 16: Trends in Availability of Drugs as Perceived by 10th Graders*, MONITORING THE FUTURE, <http://monitoringthefuture.org/data/21data/table16.pdf>.

experience—bolstered by other real-world data—to conclude that marketing and access restrictions are inherently insufficient to adequately reduce the risk of youth initiation of these flavored products that are so appealing to the young.

C. FDA considered the public health impact of the MDO.

Petitioner also argues that FDA failed to consider the impact “of the sudden removal of more than a million flavored e-cigarette products on adult former smokers who have switched to less-harmful e-cigarettes.” Petr’s Br. 50. However, Petitioner’s entire argument depends on the very proposition FDA is requiring Petitioner to support scientifically—that there is a unique benefit of flavored e-cigarettes, as opposed to tobacco-flavored products, in helping smokers to stop smoking cigarettes. E.g., JA72. Petitioner also appears to conflate FDA’s requirement of such proof with eliminating *all* ENDS products. *See* Petr’s Br. 48-49 (“FDA has warned that forcing *ENDS products* off the market *en masse* would present a serious risk that adults, especially former smokers would migrate back to combustible tobacco products....”) (emphasis added and internal quotations omitted).

The available research suggests that even if flavored ENDS were in fact eliminated, adults are likely to shift to tobacco-flavored ENDS, rather than combustible cigarettes. In states that have prohibited the sale of flavored e-cigarettes, sales of tobacco-flavored e-cigarettes have increased and partially

compensated for the decline in flavored e-cigarette sales, suggesting that adults find tobacco-flavored e-cigarettes to be a viable alternative to flavored products.¹⁸ In Washington State, New York, and Rhode Island, the increases in sales of tobacco-flavored e-cigarettes were approximately 40.52%, 43.08%, and 49.17% of the total sales decreases, respectively.¹⁹ These results are unsurprising given that, according to a government survey, flavors are the seventh most commonly reported reason for e-cigarette use among adults ages 25 and older; in contrast, flavors are the number one reason for use among youth (ages 12-17) and young adults (ages 18-24).²⁰

The fact is that FDA carefully considered the public health impact of flavored products like those sold by Petitioner and concluded that Petitioner had offered insufficient evidence that those products have a unique public health benefit that outweighs the demonstrated harm they inflict on the young.

¹⁸ Fatma Romeh M. Ali et al., *Evaluation of Statewide Restrictions on Flavored e-Cigarette Sales in the US From 2014 to 2020*, 5 JAMA NETWORK OPEN 1, 5 (2022), <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2788925>.

¹⁹ *Id.*

²⁰ Samir S. Soneji et al., *Use of Flavored E-Cigarettes Among Adolescents, Young Adults, and Older Adults: Findings From the Population Assessment for Tobacco and Health Study*, 134 PUB. HEALTH REP. 282, 284 (2019), <https://pubmed.ncbi.nlm.nih.gov/30857471/>.

II. FDA’s Requirement of Reliable Evidence that Petitioner’s Flavored Products Confer a Greater Benefit in Helping Smokers to Stop Smoking than Tobacco-Flavored Products Is Well Within the Agency’s Statutory Authority.

A. FDA’s evidentiary requirement is at the core of the TCA’s public health standard.

In addition to arguing that the MDO was arbitrary and capricious, Petitioner asserts that FDA lacks any authority under Section 910 of the FFDCA to impose a requirement that Petitioner’s flavored products are more effective in helping smokers stop smoking than a comparable tobacco-flavored product. Petr’s Br. 51-55. Petitioner’s argument ignores the relevant statutory language. As previously noted, under Section 910, whether the marketing of a new tobacco product is appropriate for the protection of the public health requires a determination of whether non-users of tobacco products “will start using such products” and whether “existing users of tobacco products will stop using such products.” 21 U.S.C. § 387j(c)(4). FDA expressly made these determinations when it found overwhelming evidence that non-tobacco flavors drive youth initiation to a greater degree than tobacco-flavored products, and further required Petitioner to marshal robust evidence that its flavored products produce a countervailing benefit in helping

smokers stop smoking greater than whatever such benefit may be conferred by tobacco-flavored products.²¹

If flavored products yield no greater benefit than unflavored products in helping smokers stop smoking, but have the serious added harm of enticing children to begin using ENDS, then there can be no net public health benefit from authorizing flavored products. Rather, the increased youth initiation from flavored products would be a clear public health detriment. Not only does Section 910 give FDA the authority to engage in such a risk-benefit assessment of flavored versus tobacco-flavored products, that assessment is *required* by Section 910 because it is at the core of the public health standard.

B. FDA did not evaluate Petitioner’s applications under the modified risk tobacco product or drug approval standards.

Contrary to Petitioner’s suggestion (Petr’s Br. 52-54), FDA’s approach imported neither the modified risk tobacco product nor the drug approval standards into Section 910; those standards are entirely distinct from the standard in Section 910, which FDA appropriately applied in evaluating Petitioner’s applications.

It is telling that Petitioner cannot decide whether it believes FDA evaluated its applications according to the standards for a modified risk tobacco product order

²¹ *Amici* do not read the MDO or TPL Review as concluding that tobacco-flavored ENDS help smokers stop smoking; rather these documents reflect the conclusion that a higher level of evidence of such a benefit is necessary for flavored products, given their intense appeal to youth.

under Section 911 or under the entirely different drug approval standards in Section 505 of the FFDCA. *See* Petr's Br. 52 (arguing that FDA imposed the “requirements of the [modified risk tobacco product] pathway...or even those for nicotine replacement products with cessation claims (which are regulated as drugs)”). FDA did neither. It properly evaluated Petitioner’s applications under the standards set forth in Section 910.

In contrast to Section 910, which requires FDA to decide whether the introduction of a new tobacco product meets the public health standard, 21 U.S.C. § 387j(c)(4), the modified risk tobacco product standard in Section 911 is focused on *specific claims or other actions directed to consumers* that communicate that a tobacco product (whether new or not) “presents a lower risk of tobacco-related disease or is less harmful” than other commercially marketed tobacco products (modified risk claim), or that a “tobacco product or its smoke contains a reduced level of a substance...[,] presents a reduced exposure to a substance...or is free of a substance” (modified exposure claim). 21 U.S.C. § 387k(b)(2)(i). Here, as Petitioner has not sought to make any such modified risk or exposure claims, FDA appropriately did not apply the standards set out in Section 911.

The drug approval standard in Section 505 of the FFDCA is similarly distinct and not at issue here. The drug approval standard requires FDA to decide whether a drug is safe and effective for its intended use. The requirement to demonstrate

safety involves weighing a drug's risks against its benefits. *See* 21 U.S.C. § 355(b)(1)(A). While Petitioner is correct that products “must be regulated as drugs when they are marketed with [tobacco] cessation claims,” Petr's Br. 53, the drug standard has no application to tobacco products which, as here, do not make such therapeutic claims and are inherently unsafe. Thus, Petitioner's applications were properly assessed under Section 910's new tobacco product authorization standards.

III. FDA's Requirement of Strong Evidence that Petitioner's Flavored Products Confer a Greater Benefit in Helping Smokers Stop Smoking than Tobacco-Flavored Products Is Not a Product Standard or an Agency Decision Requiring Rulemaking.

According to Petitioner, FDA's requirement of strong evidence that flavored products help smokers stop smoking cigarettes more effectively than tobacco-flavored products is itself a product standard, requiring notice-and-comment rulemaking. Petr's Br. 58-59. This argument simply misunderstands the nature of a product standard under the TCA.

Under Section 907 of the FFDCA, FDA has the authority to set product standards if the agency can demonstrate that they are appropriate for the protection of the public health, a required showing that parallels the showing companies generally must make to market new tobacco products under Section 910.²² Under

²² Compare 21 U.S.C. § 387g(a)(3)(A) (“The Secretary may adopt tobacco product standards...if...appropriate for the protection of the public health”), with 21 U.S.C. § 387j(c)(2) (“The Secretary shall deny an application...if...there is a lack of

Section 907, a product standard is a rule that restricts the manufacture of products with certain properties, whether those products are “new” products (first marketed after February 15, 2007) or not. That section itself establishes a product standard (the “Special Rule for Cigarettes”) prohibiting flavors in cigarettes, providing that they “shall not contain, as a constituent (including a smoke constituent) or additive, an artificial or natural flavor (other than tobacco or menthol) or an herb or spice . . . that is a characterizing flavor of the tobacco product or tobacco smoke.” 21 U.S.C. § 387g(a)(1)(A).

Section 907 grants FDA the authority to “adopt product standards in addition to” the cigarette “Special Rule” if shown to be appropriate for the protection of the public health. 21 U.S.C. § 387g(a)(3)(A). It provides that a product standard “shall, where appropriate for the protection of the public health, include provisions respecting the construction, components, ingredients, additives, constituents, including smoke constituents, and properties of the tobacco product.” 21 U.S.C. § 387g(a)(4)(B); *see also U.S. Smokeless Tobacco Mfg. Co. LLC v. City of New York*, 708 F.3d 428, 433 (2d Cir. 2013) (In Section 907, Congress “banned the use of flavoring additives in cigarettes and authorized the FDA to prohibit the use of other

showing that permitting such tobacco product to be marketed would be appropriate for the protection of the public health.”).

ingredients in tobacco products if it deems them particularly harmful to the public health.”).

By requiring particularly probative evidence of a benefit of non-tobacco-flavored products in helping cigarette smokers to stop smoking for purposes of a marketing order under Section 910, FDA has not prohibited the manufacture of e-cigarettes with such flavors, as a product standard would do; indeed, the agency has set forth the kind of evidence that may be sufficient to market new flavored products in the absence of a product standard prohibiting those flavors.

Finally, Petitioner’s argument that FDA was otherwise required to follow notice-and-comment rulemaking procedures when announcing its approach to flavored ENDS applications (Petr’s Br. 56-58) ignores long-standing Supreme Court precedent that an agency “is not precluded from announcing new principles in an adjudicative proceeding and that the choice between rulemaking and adjudication lies in the first instance within the [agency’s] discretion.” *N.L.R.B. v. Bell Aerospace Co. Div. of Textron, Inc.*, 416 U.S. 267, 294 (1974); *see also N.L.R.B. v. Wyman-Gordon Co.*, 394 U.S. 759, 765 (1969) (“Adjudicated cases may and do, of course, serve as vehicles for the formulation of agency policies....”). It was well within FDA’s discretion to choose how to announce its policy on the types of evidence that PMTAs for flavored e-cigarette products must include. Thus, FDA’s requirement for robust and product-specific evidence that Petitioner’s flavored products are more

effective than tobacco-flavored e-cigarettes in helping cigarette smokers stop smoking was not a product standard or a rule requiring notice-and-comment rulemaking.

IV. Petitioner’s Requested Relief Would Be Contrary to the TCA and Harm Public Health.

Petitioner asserts that, if the Court vacates the MDO but determines that FDA acted within its statutory authority, the Court should grant a myriad of alternative additional relief, all of which appear to boil down to allowing Petitioner to keep its products on the market while it conducts the studies necessary to secure approval. Petr’s Br. 60-61. The Court should reject this argument because such relief, if granted, would be contrary to the TCA and profoundly harmful to public health.

As discussed *supra* Section I.A., Petitioner’s addictive, flavored products are highly attractive to youth, and Petitioner has not offered evidence sufficient to show that its products provide a countervailing public health benefit to justify allowing their continued marketing. Under the TCA, manufacturers may only market tobacco products if they have first demonstrated that their products are appropriate for the protection of the public health; they have no inherent right to market tobacco products that do not meet that standard. *See* 21 U.S.C. § 387j(c)(2). Indeed, because they have no marketing order, Petitioner’s products have been on the market only through the enforcement forbearance of FDA. *See generally, Am. Academy of Pediatrics v. FDA*, 379 F. Supp. 3d 461, 468, 493 (D. Md. 2019) (noting that e-

cigarette manufacturers have enjoyed “a holiday from meeting the obligations of the law”).

Should the Court vacate the MDO, but recognize FDA’s authority to require the kinds of studies necessary to show a benefit to adult smokers, any further relief to Petitioner allowing it to keep its products on the market while it conducts the required studies would turn the TCA on its head by allowing Petitioner to market its products despite having failed to satisfy the statutory public health standard, a showing the TCA expressly requires applicants to demonstrate *before* marketing a tobacco product. 21 U.S.C. § 387j(c)(2) (FDA shall deny a premarket application if “there is a lack of a showing that *permitting such tobacco product to be marketed* would be appropriate for the protection of the public health.”) (emphasis added).

Importantly, further relief would also effectively place the burden of Petitioner’s continuing failure to meet the public health standard on the young people who have already suffered so seriously at the hands of flavored e-cigarette manufacturers, rather than on the companies that have enjoyed the benefit of a years-long regulatory “holiday.” If granted, Petitioner’s requested relief would run counter to the TCA and have profoundly negative public health consequences. It therefore should be denied.

CONCLUSION

For these reasons, and those presented by the government, *amici* urge the Court to uphold the MDO.

Dated: March 23, 2022

Respectfully submitted,

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CERTIFICATE OF ADMISSION TO THE BAR

Pursuant to L.A.R. 46.1(e), I, William B. Schultz, hereby certify that I am a member of the bar of the United States Court of Appeals for the Third Circuit.

Dated: March 23, 2022

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I hereby certify under Fed. R. App. P. 29(a)(2) that on March 15, 2022, I contacted counsel for the Petitioner and Respondent by electronic mail and that Petitioner and Respondent each consented to the filing of the brief of *amici curiae*.

/s/ Andrew N. Goldfarb
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CERTIFICATE OF SERVICE

I hereby certify that on March 23, 2022, I filed the foregoing via the CM/ECF system, which will send a Notification of Electronic Filing to all counsel of record.

/s/ William B. Schultz

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