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Brief Report

IQOS Marketing Strategies and Expenditures in the United States From Market Entrance in 2019 to Withdrawal in 2021

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Abstract

Introduction: IQOS entered the U.S. market in October 2019, then received the Food and Drug Administration (FDA)'s modified risk tobacco product authorization (MRTPA) allowing use of "reduced exposure" claims in marketing in July 2020. A May 2021 court decision regarding patent infringement required IQOS' removal from the U.S. market in November 2021.

Aims and Methods: Using 2019–2021 Numerator marketing data, this study characterized ad occurrences and expenditures—including allocation per ad content (headline theme, imagery) and media type and channel—pre- and post-MRTPA; exploratory analyses characterized the post-court to withdrawal period separately.

Results: The study period entailed 685 occurrences and $15 451 870 in expenditures. The proportions of occurrences across the three periods (pre-MRTPA, post-MRTPA, and post-court) were 39.3%, 48.8%, and 12.0%, respectively ($p < .001$); the proportions of expenditures were 8.6%, 30.0%, and 61.5%. Overall, 73.1% of ad occurrences were via online display; 99.6% of expenditures occurred in print. Per occurrences, prominent pre-MRTPA headline themes included "future" (40.2%), "real tobacco" (38.7%), "get IQOS" (35.3%), and "innovation or technology" (20.1%); post-MRTPA, prominent themes included "not burned or heat control" (32.7%), "reduced exposure" (26.4%), and "distinct from e-cigarettes" (20.7%). Visuals mainly depicted the product alone (pre-MRTPA: 86.6%; post-MRTPA: 76.1%), but increasingly featured women (pre-MRTPA: 8.6%; post-MRTPA: 21.5%). The most prominent media channel theme pre-MRTPA was "technology" (19.7%), but post-MRTPA included "women's fashion" (20.4%) and "entertainment or pop culture/gaming" (19.0%).

Conclusions: IQOS leveraged MRTPA in ads, continued marketing post-court decision, and targeted key consumer groups (ie, women). Marketing surveillance of products granted MRTPA is needed, domestically and in other countries, to assess its use and impact.

Implications: Philip Morris (PM) leveraged IQOS' MRTPA from the U.S. FDA, and continued marketing IQOS after its withdrawal from the U.S. market due to a patent-infringement-related court decision. Notably, IQOS marketing increasingly targeted key consumer groups (eg, women). Given IQOS' potential return to the United States, PM's use of FDA's MRTPA to promote IQOS as a risk reduction product in other countries, and FDA's MRTPA for other products, it is crucial to monitor products receiving MRTPA, their marketing, and their population impact, domestically and in other countries.

Introduction

The nicotine and tobacco product marketplace has evolved rapidly with the emergence of new products, such as heated tobacco products (HTPs) which heat rather than burn tobacco.[1] IQOS, a HTP manufactured by Philip Morris International, launched in 2014 and is aggressively marketed in more than 60 countries.[1] Although evidence indicates that HTPs expose consumers to lower levels of toxic chemicals than combustible cigarettes,[2] the potential public health impacts of HTPs are uncertain.[1] Nonetheless, IQOS' market expansion and increasing availability have impacted consumers' awareness, perceptions, use behaviors, and intention to use.[3]

In the United States, the 2016 Deeming rule extended regulatory authority of the Food and Drug Administration (FDA) to emerging tobacco products, including HTPs.[4] This rule requires that new tobacco products file a Premarket Tobacco Product Application and receive FDA authorization.[5] Additionally, manufacturers can apply for FDA's modified risk tobacco product authorization (MRTPA), which permits

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certain products to market with explicit "reduced exposure" or "reduced risk" claims.[6]

In April 2019, FDA authorized Philip Morris (PM) USA's premarket application for IQOS[7]; in October 2019, IQOS was launched in the United States in Georgia, followed by three other states (ie, North Carolina, South Carolina, and Virginia). In July 2020, FDA authorized the use of "reduced exposure," but not "reduced risk," claims in IQOS marketing.[8] In May 2021, a U.S. International Trade Commission court decision regarding a patent-infringement lawsuit initiated by British American Tobacco against PM required PM to discontinue IQOS sales in the United States in November 2021.[9] Regardless, PM and other tobacco companies will likely pursue HTP sales in the United States,[9] and their marketing will continue to impact consumers' perceptions and use.[10] Moreover, surveillance of HTPs and other products granted FDA MRTPA (ie, General Snus, VLN cigarettes) will be critical to inform related regulatory efforts in the United States in the future.[11]

A prior study examining IQOS advertising in the United States from August 2019 to April 2021 suggested the importance of the MRTPA to PM, as reflected by significant increases in advertising expenditures post-authorization and their use of authorized language as soon as PM was allowed.[12] There are several concerns related to IQOS' MRTPA. First, consumers may misinterpret claims indicating reduced exposure to mean reduced risk.[11] Second, PM has exploited FDA's MRTPA in its marketing efforts globally.[13] Third, the aforementioned study indicated that certain ad characteristics (eg, media channels used, imagery in ads) suggested potential targeting of young people and women.[12] This literature underscores concerns about the potential negative population impact of IQOS and its marketing, both domestically and globally.

Despite what is known about IQOS' marketing,[12] little research has investigated PM's IQOS marketing throughout its duration in the United States. The aforementioned study included less than a year after IQOS' MRTPA and excluded when PM faced the lawsuit's uncertain outcomes.[12] This is important, given that the remainder of 2021 could have increased its visibility due to the lawsuit, which could have increased its penetration among U.S. consumers if the court decision had not required its removal. As it turned out, however, the court decision required IQOS' removal from the U.S. market before it gained notable market share. Therefore, to expand on the earlier study,[12] the current study examined the full duration of IQOS' marketing presence in the United States, from 2019 to the end of 2021. In doing so, we examined characteristics of IQOS ads (ie, headlines, visuals, media types, and media channels) before and after the FDA MRTPA; exploratory analyses characterized ads during the final period—after the lawsuit until IQOS' removal from the U.S. market in November 2021.

Methods

Data and Procedures

We analyzed data from Numerator, a media tracking company that monitors more than 2600 English language media outlets across various marketing channels, including print ads (in newspapers, magazines, and inserts), TV, radio, cinema, mobile, online displays or videos, outdoor, and social media in the United States.[12] This study covered all IQOS advertising data from August 2019 to the end of 2021. Each ad occurrence represented a unique occurrence of an ad circulated via a specific media outlet[14] and was attached to metadata regarding run date, headline, visual, media type (ie, mobile, online display, online video, print, radio, and TV), media channel (eg, specific magazines, website, etc.), and unadjusted advertising expenditures.

Each ad occurrence's run date was categorized as pre- versus post-MRTPA periods (ie, first run either before or after July 7, 2020); we further dichotomized post-MRTPA as pre- versus post-court decision (ie, before or after May 15, 2021). Ad characteristics were operationalized using a mixed-methods approach. For each unique ad, we recorded the headline (see Table 1 for headlines). Then, two team members (ie, ZD, LG) assigned headline themes (eg, "real tobacco," "innovation or technology") and visual themes (eg, product-only, person) for each ad, and media channel themes (eg, news or weather, business) for each channel associated with an ad occurrence. Themes were drawn from those in the previous study[12] augmented with any new themes that emerged from April to December 2021 (see Table 2 for full list of headline, visual, and media channel themes). Initial interrater reliability exceeded 85% for each theme; discordantly coded headlines were discussed and resolved. Advertising expenditures were adjusted to the 2019 Q3 dollars to account for the inflation across the study period.[15]

Data Analysis

We conducted descriptive and bivariate analyses of ad occurrences (using Chi-square tests) and expenditures (using *t*-tests and ANOVAs) by media type, headline and visual theme, and theme of media channels to characterize IQOS advertising overall, as well as by period in the U.S. market—pre- versus post-MRTPA. Exploratory analyses also examined post-court IQOS advertising, from the time of the court decision to IQOS' withdrawal from the U.S. market. All data management and analyses were conducted using Stata 15.1 (StataCorp LLC, College Station, TX).

Results

Primary Analyses: Pre- Versus Post-MRTPA

There were 685 total ad occurrences: 39.3% (n = 269) pre-MRTPA and 60.7% (n = 416) post-MRTPA (Table 2). Inflation-adjusted ad expenditures totaled $15 451 870: 8.6% ($1 322 048) pre-MRTPA and 91.4% ($14 129 822) post-MRTPA. Average ad expenditure per occurrence was $22 590: $4910 pre-MRTPA and $34 050 post-MRTPA ($p$ < .001). Print accounted for most expenditures (99.6%); online display accounted for most occurrences (73.1%). From pre- and post-MRTPA, the proportion of ad occurrences via online display decreased (94.1% vs. 59.6%), but the proportions via print and mobile increased (4.1% vs. 30.8% and 1.9% vs. 9.6%, respectively, p < .001).

The ad headline representing the most occurrences pre-MRTPA was "The future of tobacco is here" (13.0%), followed by "Get IQOS" (10.7%) and "Real tobacco meets innovative technology" (6.3%; Table 1). Post-MRTPA, the most prominent ad headlines included "Get IQOS: Real heated tobacco is here with less odor to worry about; there's no need to step away" (8.2%), "Get IQOS" (8.0%), and "IQOS uses heat sticks made with real tobacco" (8.0%).

Shown in Table 2, across ad occurrences and expenditures, prominent pre-MRTPA headline themes included "real

Table 1. IQOS Ad Headlines and Example Content Pre- and Post-MRTPA (Modified Risk Tobacco Product Authorization)

Ad Headline	Occurrences (of 685 total) *N* (%)
Pre-MRTPA (*n* = 269)	
The future of tobacco is here.	89 (13.0)
Get IQOS.	73 (10.7)
Real tobacco meets innovative technology.	43 (6.3)
The future of real tobacco has arrived.	19 (2.8)
Get IQOS: real tobacco less odor.	16 (2.3)
Meet IQOS: real tobacco no ash less odor.	11 (1.6)
Get IQOS: real heated tobacco is here with less odor to worry about. There's no need to step away.	6 (0.9)
IQOS uses heatsticks made with real tobacco.	6 (0.9)
With heat control technology real tobacco is heated never burned. IQOS: be one of the first to switch.	3 (0.4)
We built a new way to enjoy tobacco with heat control technology. Real tobacco is heated never burned. IQOS: Be one of the first to switch.	2 (0.3)
Real, heated tobacco is here with less odor to worry about. There's no need to step away. Real tobacco, no interruptions.	1 (0.2)
Post-MRTPA (*n* = 416)	
Get IQOS: real heated tobacco is here with less odor to worry about. There's no need to step away.	56 (8.2)
Get IQOS.	55 (8.0)
IQOS uses heatsticks made with real tobacco.	55 (8.0)
Reduce your body's exposure to harmful chemicals by switching completely from cigarettes to IQOS.	41 (6.0)[a]
With heat control technology real tobacco is heated never burned. IQOS: be one of the first to switch.	36 (5.3)
Why make the switch from cigarettes to IQOS? The IQOS system heats tobacco but does not burn it.	16 (2.3)
Real, heated tobacco is here with less odor to worry about. There's no need to step away. Real tobacco, no interruptions.	13 (1.9)
Purchase an IQOS bundle with same-day delivery in select cities.	11 (1.6)
We built a new way to enjoy tobacco with heat control technology. Real tobacco is heated never burned. IQOS: be one of the first to switch.	11 (1.6)
IQOS is the only tobacco product of its kind that can say this. The IQOS system heats tobacco but does not burn it.	12 (1.8)[b]
Too busy to make an appointment? Experience IQOS at home. Order an IQOS bundle with same-day delivery in select cities.	10 (1.5)
It's not a vape. It's not an e-vape. It's real tobacco with less odor and no ash.	54 (7.9)[c]
Order an IQOS bundle with same-day delivery in select cities. Experience less lingering odor from the comfort of your couch.	6 (0.9)
Half off! Use promo code device50 at getIQOS.com.	3 (0.4)
Experience heated tobacco sooner than ever. Purchase an IQOS bundle with same-day delivery in select cities.	2 (0.3)
We built a new way to enjoy tobacco with heat control technology. Real tobacco is heated, never burned.	3 (0.5)[d]
Only post-court decision (n = 33)	
No lighters. No ashtrays. Just real tobacco with less lingering odor.	14 (2.0)
Cigarettes burn tobacco. IQOS heats it. There's a reason why.	9 (1.3)
See why our heat-not-burn technology matters.	8 (1.2)
Stay ready.	1 (0.2)

[a]1 (0.2%) was post-court decision;
[b]2 (0.3%) were post-court;
[c]46 (6.7%) were post-court;
[d]1 (0.2%) was post-court.

tobacco" (38.7% of occurrences, 98.5% of expenditures), "less odor or ash" (12.6%, 97.9%), "Get IQOS" (35.3%, 0.7%), "future" (40.2%, 1.1%), and "innovation or technology" (20.1%, 0.4%). Post-MRTPA, 3 new headline themes emerged: "reduced exposure" (26.4% of post-MRTPA ad occurrences, 77.6% of post-MRTPA expenditures), "distinct from e-cigarettes" (20.7%, 71.3%), and "science or research" (2.4%, <1%). Other prominent post-MRTPA headline themes included "not burned or heat control" (32.7%, 51.6%), "innovation or technology" (42.3%, 51.7%), and "less odor or ash" (37.5%, 73.1%). From pre- to post-MRTPA, there were significant increases ($p < .05$) in the proportion of ad occurrences focused on "real tobacco" (38.7% pre-MRTPA vs. 62.7% post-MRTPA), "innovation or technology" (20.1% vs. 42.3%), "less odor or ash" (12.6% vs. 37.5%), "not burned or heat control" (1.9% vs. 32.7%), "switch" (1.9% vs. 21.2%), and "convenience" (2.6% vs. 19.0%). There were decreases in the proportions of occurrences themed "get IQOS" (35.3% vs. 26.7%) and "future" (40.2% vs. 0%).

Table 2. IQOS Ad Occurrences (*N* = 685) and Expenditures ($15 451 870) Across Dimensions Pre- Versus Post-MRTPA (Modified Risk Tobacco Product Authorization)

	Ad occurrences				Inflation-adjusted expenditure (in thousands)[a]			
	Total	Pre-MRTPA	Post-MRTPA		Total	Pre-MRTPA	Post-MRTPA	
Variable	*N* = 685 (100%)	*N* = 269 (39.3%)	*N* = 416 (60.7%)	*p*[b]	$15 451 870 (100%)	$1 322 048 (8.6%)	*N* = 14 129 822 (91.4%)	p[c]
Media Type, *N* (%)								
Online display	501 (73.1)	253 (94.1)	248 (59.6)	**<.001**	44.84 (0.3)	28.91 (2.2)	15.93 (0.1)	.994
Print	139 (20.3)	11 (4.1)	128 (30.8)		15 394.75 (99.6)	1292.90 (97.8)	14 101.85 (99.8)	
Mobile	45 (6.6)	5 (1.9)	40 (9.6)		12.28 (0.1)	0.24 (0)	12.04 (0.1)	
Ad headline theme, *N* (%)[d]								
Real tobacco	365 (53.3)	104 (38.7)	261 (62.7)	**<.001**	11 643.24 (75.4)	1301.77 (98.5)	10 341.47 (73.2)	.623
Innovation or technology	230 (33.6)	54 (20.1)	176 (42.3)	**<.001**	7307.43 (47.3)	5.79 (0.4)	7301.65 (51.7)	**.044**
Get IQOS	206 (30.1)	95 (35.3)	111 (26.7)	**.016**	22.90 (0.1)	8.88 (0.7)	14.02 (0.1)	**<.001**
Less odor or ash	190 (27.7)	34 (12.6)	156 (37.5)	**<.001**	11 630.15 (75.3)	1294.52 (97.9)	10 335.63 (73.1)	.107
Not burned or heat control	141 (20.6)	5 (1.9)	136 (32.7)	**<.001**	7296.60 (47.2)	0.14 (0)	7296.46 (51.6)	.150
Reduced exposure	110 (16.1)	0 (0)	110 (26.4)	**<.001**	10 969.89 (71.0)	0 (0)	10 969.89 (77.6)	N/A
Future	108 (15.8)	108 (40.2)	0 (0)	**<.001**	14.59 (0.1)	14.59 (1.1)	0 (0)	**<.001**
Switch	93 (13.6)	5 (1.9)	88 (21.2)	**<.001**	3935.89 (25.5)	0.14 (0)	3935.76 (27.9)	.495
Distinct from e-cigarettes	86 (12.6)	0 (0)	86 (20.7)	**<.001**	10 072.32 (65.2)	0 (0)	10 072.32 (71.3)	N/A
Convenience (eg, use indoors)	86 (12.6)	7 (2.6)	79 (19.0)	**<.001**	9.85 (0.1)	0.25 (0)	9.60 (0.1)	.075
Same-day or home delivery	29 (4.2)	0 (0)	29 (7.0)	**<.001**	0.98 (0)	0 (0)	0.98 (0)	N/A
Enjoyment or satisfaction	16 (2.3)	2 (0.7)	14 (3.4)	**.027**	2.43 (0)	0.01 (0)	2.42 (0)	.452
Science or research	10 (1.5)	0 (0)	10 (2.4)	**.010**	2.78 (0)	0 (0)	2.78 (0)	N/A
Ad visual theme, *N* (%)								
Product	548 (80.2)	233 (86.6)	315 (76.1)	**<.001**	14 866.43 (97.6)	1318.87 (99.8)	13 547.56 (95.9)	**.009**
Product with woman	112 (16.4)	23 (8.6)	89 (21.5)		362.71 (2.4)	1.62 (0.1)	361.09 (2.6)	
Product with man and women	13 (1.9)	13 (4.8)	0 (0)		1.56 (0)	1.56 (0.1)	0 (0)	
Product with man	6 (0.9)	0 (0)	6 (1.5)		0.25 (0)	0 (0)	0.25 (0)	
Text only	4 (0.6)	0 (0)	4 (1.0)		0.31 (0)	0 (0)	0.31 (0)	
Media channel theme, *N* (%)								
Women's fashion	116 (16.9)	31 (11.5)	85 (20.4)	**<.001**	2177.35 (14.1)	413.37 (31.3)	1763.98 (12.5)	**<.001**
Technology	114 (16.6)	53 (19.7)	61 (14.7)		515.42 (3.3)	382.66 (28.9)	132.76 (0.9)	
News or weather	88 (12.9)	36 (13.4)	50 (12.0)		4805.23 (31.1)	17.14 (1.3)	4,788.14 (33.9)	
Entertainment or pop culture/ gaming	83 (12.1)	4 (1.5)	79 (19.0)		5360.97 (34.7)	0.20 (0)	5360.78 (37.9)	
Home	56 (8.2)	17 (6.3)	39 (9.4)		2.57 (0)	0.54 (0)	2.02 (0)	
Men's fashion	38 (5.6)	10 (3.7)	28 (6.7)		2131.81 (13.8)	498.97 (37.7)	1632.84 (11.6)	
Sports	35 (5.1)	29 (10.8)	6 (1.4)		5.22 (0)	3.10 (0.2)	2.12 (0)	
Business	30 (4.4)	24 (8.9)	6 (1.4)		313.46 (2.0)	1.32 (0.1)	312.14 (2.2)	
Travel	22 (3.2)	4 (1.5)	18 (4.3)		125.51 (0.8)	0.05 (0)	125.46 (0.9)	
Yahoo	20 (2.9)	19 (7.1)	1 (0.2)		0.86 (0)	0.78 (0.1)	0.08 (0)	
Other	83 (12.1)	42 (15.6)	41 (9.9)		13.41 (0.1)	3.90 (0.3)	9.52 (0.1)	

[a]Adjusted by consumer price index (2019 Q3, U.S. Bureau of Labor Statistics).
[b]Per Chi-square tests.
[c]Per ANOVAs.
[d]Headline themes not discrete. N/A: ANOVAs not applicable due to empty cells.

From pre- to post-MRTPA, there were increases in the proportion of ad occurrences and expenditures allocated to ads featuring women with the product (from 8.6% to 21.5% per ad occurrences and 0.1% to 2.6% per ad expenditures), but decreases in ads featuring the product alone (from 86.6% to 76.1% per occurrences and 99.8% to 95.9% per expenditures; Table 2).

The most prominent pre-MRTPA media channel theme was "technology" (19.7% of occurrences, 28.9% of expenditures; Table 2). The most prominent post-MRTPA media channel themes post-MRTPA were "women's fashion" (20.4% of occurrences, 12.5% of expenditures) and "entertainment or pop culture/gaming" (19.0%, 37.9%).

Exploratory Analyses: Pre-MRTPA, MRTPA to Court Decision, and Post-court

The proportions of ad occurrences across the three periods were 39.3%, 48.8%, and 12.0%, respectively ($p < .001$; Supplementary Table), the proportions of ad expenditures were 8.6%, 30.0%, and 61.5%, and the average expenditures per occurrence were $4910, $13 860, and $117 310 ($p < .001$). There were few new headlines post-court decision, most commonly aiming to distinguish IQOS from cigarettes (eg, "No lighters. No ashtrays. Just real tobacco with less lingering odor"; Table 1). Post-court, ad occurrences, and expenditures indicated the prominence of print media (97.6% of post-court occurrences, nearly all of post-court expenditures); headline themes indicating "real tobacco" (97.6%, 99.0%), "less odor or ash" (96.3%, 99.0%), "distinct from e-cigarettes" (95.1%, 96.3%), "not burned or heat control" (72.0%, 73.6%), "innovation or technology" (72.0%, 73.6%), and "reduced exposure" (70.7%, 73.6%); ad imagery focused on the "product" (96.3%, 96.2%); and media channels thematically focused on "entertainment or pop culture/gaming" (40.2%, 43.2%) and "news or weather" (35.4%, 39.6%).

Discussion

This study expanded on previous research[12] by examining the full duration of IQOS' presence in the U.S. market, including after being the court order requiring its removal from the United States. Findings suggest that IQOS was aggressively marketed in the United States after receiving MRTPA, and such marketing remained aggressive after the court decision. This may potentially account for the recently growing awareness of IQOS in the United States[16,17] and may lay the foundation for IQOS to reenter the U.S. market, which is likely.[9]

Post-MRTPA, new headline themes emerged (ie, "reduced exposure," "science or research"), and some existing headline themes increased in prominence (ie, "switch," "not burned or heat control"). Additionally, the theme "distinct from e-cigarettes" emerged, perhaps reflecting efforts to distinguish IQOS from e-cigarettes due to the attention focused on e-cigarette and vaping-associated lung injury.[18] Visual themes and marketing channel themes suggest increased targeting of women post-MRTPA, with media channels (ie, entertainment or pop culture/gaming) potentially targeting young and/or technology-savvy people; these findings align with findings from prior research[12] and provide more comprehensive data throughout IQOS' presence in the U.S. market.

Notably, the pre-MRTPA period showed no evidence of paid IQOS ads using reduced exposure (or risk) claims. However, these data do not include content not clearly paid for by PM (eg, third-party promotion). Furthermore, certain ad headlines that did not require MRTPA (eg, "Meet IQOS: Real tobacco no ash less odor") may impact consumers' risk perceptions.[11] This latter point may also explain why only ~26% of post-MRTPA ads used MRTPA language; perhaps industry research found that advertising language not requiring MRTPA had similar impact—or different consumer segments are impacted by advertising language unrelated to exposure or risk.

Also notable is the large proportion of ad expenditures for print versus online, which contrasts the large proportion of ad occurrences online relative to print. Advertising in traditional media like print is more expensive but perhaps a necessary part of a marketing strategy.[19] However, digital media provides a low-cost alternative with high reach that is increasingly used by industries,[19] including the tobacco industry.[20]

Limitations

Study limitations include potential underestimates of ad expenditures, due to possible missing data and unassessed marketing activities, like event sponsorship or social media promotions—either directly or indirectly traceable to industry financial support. Additionally, the relatively small number of ad occurrences limited statistical power, and ad expenditures were heavily influenced by print-related expenditures. Finally, coronavirus disease 2019 and other regulatory and societal events likely impacted IQOS marketing activities during this timeframe.

Conclusions

IQOS was increasingly marketed post-MRTPA, despite its court-required removal from the U.S. market. Given IQOS' potential reentry to the United States, surveillance of its marketing strategies in the United States if or when it does—and in other countries—is crucial, particularly given PM's exploitation of the FDA authorization to promote IQOS in other countries.[12,13] Additionally, as the nicotine market in the United States expands, further population studies are needed to evaluate the impact of marketing, particularly marketing using reduced risk or exposure language, on consumer understanding, perceptions, and behaviors, including among specific subpopulations.

Supplementary Material

A Contributorship Form detailing each author's specific involvement with this content, as well as any supplementary data, are available online at https://academic.oup.com/ntr.

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Declaration of Interests

YB-Z has received fees for lectures from Pfizer, Novartis NCH, and GSK Consume Health (distributors of pharmacotherapy in Israel) in the past (2012–July 2019). LCA receives royalties for the sale of Text2Quit. No other conflicts of interest are declared. The authors declare no other conflicts of interest.

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Data Availability

Data not publicly available.

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