

# Tobacco industry marketing adaptations to Singapore plain packaging

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## ABSTRACT

**Background** Singapore has implemented plain packaging, a measure that strips all colours, logos and branding elements from tobacco packs. In other countries, tobacco companies responded to plain packaging with a variety of marketing tactics. Our goal was to describe the tobacco industry's marketing adaptations to Singapore plain packaging.

**Methods** Qualitative analysis of 378 cigarette packs sampled from Singapore retailers in March 2019, March 2020 and January 2021, 12 months prior to, 2 weeks prior to and 6 months after plain packaging phase-in, respectively. For each pack, we collected descriptive information on the brand and variant name, pack and stick dimensions, pack shape, differentiating features and distinctive scents, as well as photographic data of the pack, cigarette sticks and any distinct features. We used the March 2019 collection as our baseline dataset, and March 2020 and January 2021 collections as comparison datasets to examine changes in tobacco marketing strategies just before and after plain packaging phase-in.

**Results** Around Singapore's plain packaging phase-in, tobacco companies launched variants with flavour capsules, novelty filter features and new flavours and used more descriptive variant names reflecting the variant's colour coding or market positioning. Tobacco companies revamped some existing variants, often with Japanese marketing themes to convey a more premium product image. After plain packaging, tobacco companies used longer packs and variations in stick length, filter length and foil texture to further differentiate products.

**Conclusions** Following plain packaging in Singapore, tobacco companies rely increasingly on nomenclature and the cigarette stick itself to market and differentiate products.

## INTRODUCTION

Tobacco plain packaging strips all colours, logos and branding elements from tobacco packs, requiring tobacco products to be sold in standardised packs.<sup>1</sup> Australia first implemented plain packaging in 2012 after which the UK, France, New Zealand, Norway and a number of other countries followed suit.<sup>2</sup> More recently, Singapore phased in plain packaging on 1 July 2020 after a 3-month grace period.<sup>3</sup> Singapore's legislation requires all tobacco products to be packaged in matte finished, dark brown coloured packs of a standard size (height 85–104 mm, width 55–66 mm, depth 20–28 mm), with six rotating graphic health warnings covering at least 75% of the pack, and brand and variant names shown in a standardised font, size (5.0 mm and 3.5 mm, respectively), length (no longer than 50 mm and 35 mm, respectively) and position on the pack (figure 1).

The mandate also standardises the pack texture, opening mechanism (only flip top is permitted) and cigarette stick dimensions (diameter 7–9 mm, maximum length 100 mm) and does not permit decorative or other marketing features on the pack, cellophane wrapping or cigarette sticks.<sup>4</sup>

Evidence has shown that plain packaging reduces the appeal of smoking and tobacco packs,<sup>5 6</sup> increases the salience of graphic health warnings,<sup>7</sup> discourages youth smoking<sup>8–11</sup> and motivates quit attempts.<sup>1 6 12</sup> The package is an important marketing medium for tobacco companies,<sup>13 14</sup> and plain packaging severely restricts tobacco companies' ability to market and differentiate tobacco products, especially where comprehensive regulations on other forms of tobacco marketing, such as advertising, point of sale promotions and sponsorships, already exist. Thus, tobacco companies have vehemently fought against plain packaging with aggressive lobbying and litigation<sup>15</sup> and took steps to pre-empt plain packaging in Singapore as early as 1996,<sup>16 17</sup> two decades before the regulation was formally considered.<sup>18</sup>

In the UK and Australia, tobacco companies also used a variety of marketing tactics to undermine the impact of plain packaging. Tobacco companies redesigned packs, changed brand and variant names to more evocative and colour-related descriptors and introduced new pack sizes, brand extensions, flavour capsule variants, filter novelties and specially designed products such as 'cover skins' and reusable tins to cover up the plain packs.<sup>19–21</sup> Beyond the experiences of the UK and Australia, however, little is known on the marketing tactics tobacco companies have used to undermine plain packaging.

Our goal was to describe the tobacco industry's marketing adaptations to Singapore plain packaging, to inform future tobacco control efforts in Singapore and in other countries that plan to implement plain packaging. Singapore's marketing regulations prohibit all direct and indirect forms of tobacco advertising and promotions but do not restrict tobacco flavours or filter design,<sup>22</sup> leaving the tobacco pack (prior to plain packaging) and cigarette stick as the available marketing mediums.<sup>23</sup> Hence, we used data from cigarette packs purchased from Singapore retailers to examine changes in the tobacco industry's marketing strategies.

## METHODS

### Sampling

Singapore phased in plain packaging from 1 April to 31 June 2020. We purchased cigarette packs from Singapore retailers in March 2019, March 2020 and January 2021, 12 months prior to, 2 weeks



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**Figure 1** Photographs of standardised cigarette packs purchased from Singapore retailers in January 2021.

prior to and 6 months after plain packaging phase-in, respectively. We focused our analysis on cigarettes as non-cigarette tobacco products (cigars, cigarillos, bidis, roll-your-own) are not widely consumed in Singapore. In all data collections we sampled one pack of every available variant from five different types of retailer (premium supermarket, mainstream supermarket, convenience store, gas station, independent store) across four geographical regions (Central, East, West, North) of Singapore to cover as wide a range of variants as possible. In March 2019, March 2020 and January 2021, we sourced a total of 128, 142 and 108 flavour and/or size variants, respectively.

### Data collection

For each pack, we collected descriptive information in Microsoft Excel using a standard template (online supplemental table 1) on brand and variant name, pack and stick dimensions, pack shape and any differentiating features on the tear tape, cellophane, foil, filter and lid interior. We longitudinally dissected all cigarette filters and sticks to detect any differentiating features such as distinctive filter designs, flavour capsules or distinctive scents. Where flavour capsules were present, we noted the scent on crushing the capsule. Where distinctive scents were present, we coded the likely flavour(s) based on the scent and, where available, any pack descriptors indicating flavour (eg, variant name 'menthol'). For each pack we also collected photographic data of all outer pack faces, the pack interior, cigarette stick exterior (back and front), cigarette stick interior after dissection and any other distinct features (eg, cellophane stickers, lid designs) using a standard template (online supplemental table 2) adapted from the Tobacco Pack Surveillance System (TPackSS) 2013 Photography Protocol.<sup>24</sup> For the January 2021 collection, since the packs were all standardised, we only took photographs of distinguishing features not observed on other variants.

### Data analysis

The descriptions and photographs of the March 2019 collection formed our baseline dataset, while the descriptions and photographs of the March 2020 and January 2021 collections were our comparison dataset to examine changes in tobacco marketing strategies around plain packaging. Using an inductive coding method, we compared brand families in the 2019, 2020 and 2021 collections to identify overall market positioning (eg, 'feminine', 'luxury'), distinctive design features (eg, 'charcoal filter', 'slim pack') and any changes in brand families/variants.

We refined our codes in an iterative process between the authors until agreement was reached (see online supplemental table 3 for codebook). To aid with our tracking of discontinued or newly launched variants, we obtained lists from the Singapore Health Sciences Authority (HSA) showing the cigarette brands and variants on the Singapore market in March 2019 and March 2020.

## RESULTS

### Overview of the Singapore cigarette market

Eight large brand families, with at least six variants each (Marlboro, LD, L&M, Lucky Strike, Viceroy, Dunhill, Camel and Mevius), all marketed by the transnational tobacco companies (TTCs) Philip Morris International (PMI), British American Tobacco (BAT) or Japan Tobacco International (JTI), comprised the vast majority of variants in our sample. The remainder included small or obsolete brands marketed by TTCs, along with a small number of traditional Chinese brands and Indonesian kretek brands (online supplemental table 4).

All of the large brand families had non-flavoured, menthol-flavoured and capsule variants. Besides flavour variants, we observed a range of pack sizes conveying value (100s, Extra, XL), convenience (pocket packs), a classic feel (soft pack) or femininity (slims) and various filter features conveying a health benefit (charcoal filter) or novelty (flavoured granules or thread in the filter, recessed filter, flavour capsules—figure 2). We also observed a broad range of capsule cigarette types, including non-flavoured cigarettes with a mint/menthol capsule, menthol-flavoured cigarettes with an additional flavour (mint/menthol or fruit), dual-capsule cigarettes and 'pick & mix' packs with a mixture of lemon, bubblegum, berry and mint capsule cigarettes (figure 2).

Colour coding (typically conveyed with pack colour, descriptors and/or variant names) was generally consistent between the brands and variants. Tobacco companies used red and, for Chinese brands, red and/or gold for cigarettes with a strong, 'original' flavour and white or blue, light gold, silver or pastel in combination with white for cigarettes with a 'light' flavour. Tobacco companies used green to code for mint/menthol-flavoured cigarettes and used various shades of green to convey a light or full flavour (pastel or darker, respectively), and secondary colours such as blue to convey additional mint or menthol flavours. Fruity flavours were conveyed with a range of colours, including purple (berry, grape or candy), yellow (lemon) and pink (cherry). 'Classic' variants generally used a white background, while flavour capsule variants typically featured bright (blue, green, purple, pink, yellow) neon-like colours against a black and/or metallic background, giving a more energetic, youthful vibe reminiscent of the strobe lighting in nightclubs.

Marlboro (PMI), the largest brand family, appeared to target the mainstream with a broad range of flavours and pack designs including 'classic' variants (Red, Gold, Menthol), 'light' variants, 'youthful' capsule variants (lemon, grape, menthol and mint/menthol), 'feminine' Touch Slims packs and a broad range of menthol-flavoured variants in various strengths and blends. LD (JTI), Lucky Strike (BAT) and Camel (JTI), which also appeared to target the mainstream, included both 'classic' (Red, Lights, Menthol) and 'youthful' (capsule and other novelty) variants, although LD and Lucky Strike focused more heavily on capsule variants. Across all the brands, packaging for the capsule variants featured bright, metallic colours and variant names such as 'Mega Ice Blast', 'Club Compact Zoom' and 'Click Wild'.

L&M (PMI), Viceroy (BAT), Dunhill (BAT) and Mevius (JTI) appeared to target more niche audiences. L&M, a value brand,





**Figure 2** Notable features observed prior to implementation of plain packaging in Singapore.

focused heavily on menthol-flavoured and capsule variants. Viceroy, similarly, focused heavily on menthol-flavoured and capsule variants but had a more premium 'Japanese' positioning

with its 'Hokkaido Mint' series. Dunhill and Mevius focused more on non-flavoured variants. Mevius had a range of 'light' options, some which contained added menthol flavour or a charcoal filter. Dunhill, a 'luxury' brand, used perfumed tobacco and luxury packaging mimicking men's perfume bottles such as those sold in the online Dunhill store, which sells men's luxury items.

### New flavour capsule and novelty variants

Two weeks prior to plain packaging, all TTCs had launched or made available new variants in their major brand families (online supplemental table 5). Most of these were menthol-flavoured and/or flavour capsule variants. Among the new capsule variants, some contained lemon (Marlboro Dry), melon (Kent Boost Fresh) and cherry (L&M Electro Blast), flavours not observed in the baseline data collection, while others contained dual capsules and flavours such as grape/berry and mint/menthol. Some brands launched additional novelty features, including the LD 'Frozen' series which featured a 'frozen' filter with menthol-flavoured granules. Six months after plain packaging, two new flavour capsule variants, with cherry (L&M Ruby Blast) and apple (Viceroy Hokkaido Mint Fuji Boost) flavoured capsules, were observed (online supplemental table 5).

### Revamping of 'classic' variants

In the run up to plain packaging, tobacco companies attempted to renew interest in 'classic' variants (Red, Lights, Menthol) in larger brand families by relaunching them as a new series or updating the package and stick designs (figure 2). PMI launched a Marlboro 'Crafted' series which touted 'rested tobacco' with a tea-like fragrance and new packaging and cigarette stick designs distinct from the usual Marlboro design. BAT launched a Japanese-themed 'J-series' for Lucky Strike, while JTI redesigned its Winston and LD classic variants with a cleaner, lighter image.

### Japanese marketing themes

Just before plain packaging, BAT and JTI both used 'Japanese' marketing themes to revamp or launch new variants in their larger brand families (figure 2). BAT launched a Lucky Strike J-series which featured four new variants marketed as 'Japan's blend' (original, light, menthol, menthol capsule) and a new fruit and mint-flavoured variant (Purple Boost) in its Japan-themed Viceroy Hokkaido Mint series. Following plain packaging, 'J-series' was incorporated into the brand name of these variants to form 'J-series Lucky Strike', and the Viceroy Hokkaido Mint range was expanded with a new apple-flavoured variant, 'Fuji Boost'. JTI launched a LD 'Frozen' series with three flavoured variants (menthol, mint capsule, fruit/menthol capsule). Unlike other LD variants, the 'Frozen' series featured Japanese-language text and slogans such as 'frozen filter with capsule from Japan'. JTI also launched two new menthol-flavoured variants in Camel which included cellophane stickers with the slogan 'Japanese quality assured'. In all cases, the Japanese marketing theme was associated with a more premium positioning to convey a superior product quality.

### Discontinuation of variants in larger brand families

In the larger brand families, several variants became unavailable. Most of these were menthol-flavoured variants in brands that, prior to plain packaging, were simultaneously launching new variants or series (online supplemental table 5). BAT discontinued its Lucky Strike 'Click' capsule cigarette series to focus on the Lucky Strike Original and J-series and discontinued the Viceroy Classic and Menthol Super variants while expanding its

Viceroy Hokkaido Mint series. PMI discontinued Touch Slims to focus on its Marlboro Crafted series and Marlboro Dry, a lemon-capsule variant. JTI discontinued its LD 'Compact' series while launching the new LD 'Frozen' series. This suggests that tobacco companies discontinued or scaled down some variants in order to shift focus onto new and/or more premium-positioned variants to generate more interest in their brands.

### Changes in smaller brands

For the smaller TTC and Chinese brands, a number of variants not available in our baseline dataset were available in the comparison datasets and vice versa. Most of these were for full-flavour, light or non-capsule menthol variants. They did not appear to be newly launched, suggesting that the changes in their availability may have been a result of retailers clearing their stock of obsolete brands. We observed no changes in the Indonesian kretek brands.

### Changes in nomenclature

Just before and after plain packaging, some variants were given more descriptive names to reflect the variant's colour coding or market positioning. Variants with previously colour coded packs took on variant names such as 'Gold', 'Silver' and 'Red Switch'. Newer series featured descriptive brand and variant names such as 'Original', 'J-series Lucky Strike', 'Hokkaido Mint', 'Frozen' and 'Crafted'. Variants with a longer size, previously called '100s', were renamed to 'Longs'. This suggests that, following plain packaging, tobacco companies are relying more on brand and variant names to market and differentiate their products.

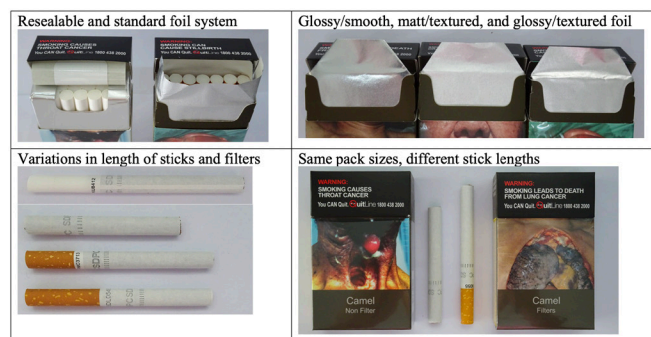
### Use of cellophane as a marketing medium

Prior to plain packaging, tobacco companies used the cellophane wrapper as a medium to promote new variants, flavours or features, such as the L&M 'firm filter' and Dunhill's 'modern sensation' range. Tobacco companies also used the cellophane wrapper to communicate information on product changes resulting from plain packaging. Some variants included cellophane graphics that appeared to 'peel off' to reveal the upcoming plain packs and plain filters when capsules markings are no longer allowed (figure 2).

### Observations after plain packaging implementation

Packs were generally compliant to the plain packaging legislation, with matte-finished, dark brown, rigid cardboard, no embellishments, no inserts and large graphic health warnings (figure 1). While some smaller size variants, such as Marlboro 'Touch Slims' and LD 'Club Compact', were unavailable after plain packaging, most brands had revised the dimensions of packs and sticks to fit the plain packaging mandate. Pack height, pack depth and cigarette stick width were the same for all variants, but the height of packs and sticks varied (figure 3). The packs and sticks for 'XL', 'Longs' and 'Slims' were longer (92–102 mm, compared with the usual range of 82–88 mm), and the cigarette sticks of a non-filtered variant, Camel, were shorter at 69 mm. For Camel Non-Filters, the height difference between the pack and sticks was offset by an empty platform space at the bottom of the pack.

Other differentiating features included the foil and cigarette filter (figure 3). The foil, which was standardised to silver, ranged from matte to glossy and smooth to textured. Some brands, such as Virginia Slims, appeared to rely more on thicker foil textures to convey 'luxury'. While most brands used a standard foil opening system, L&M and Marlboro variants had a resealable system. Filters could be cork or matte white and



**Figure 3** Notable features observed after implementation of plain packaging in Singapore.

varied in length. Filters for some variants, mostly those positioned as 'classic', were shorter in length (22 mm) while filters for some flavoured or newer variants (eg, Kent and Lucky Strike J-series) were longer (32 mm).

While scents on the packaging are prohibited by plain packaging legislation, we observed that, for some flavoured variants, the tear tape and foil gave off a fresh, minty or fruity scent. Although this could have been a result of flavours leaking from the tobacco, there were two variants with distinct scents in the tear tape that were not detected in the tobacco: L&M Double Purple Blast and Marlboro Double Burst, which had berry and spearmint scented tear tape, respectively.

### DISCUSSION

Around the time of Singapore's plain packaging phase-in, tobacco companies launched variants with flavour capsules, novelty filter features and new flavours, and started using more descriptive variant names to reflect the variant's colour coding or market positioning. Tobacco companies also redesigned 'classic' variants and used Japanese marketing themes to convey a more premium product image. In Singapore, where point of sale advertising is banned, tobacco companies used the cellophane wrapping to communicate new features prior to plain packaging, while in the UK and Australia, tobacco companies used other permissible means including retailer posters and pack inserts.<sup>20 21</sup>

The tobacco industry's launching of new flavour variants in Singapore, especially flavour capsule variants, was also observed prior to the introduction of plain packaging in Australia<sup>19 20 25</sup> and the UK,<sup>21</sup> although this is a global trend. The global market for capsule cigarettes has proliferated,<sup>26</sup> as tobacco marketing and packaging becomes increasingly regulated and the cigarette stick becomes an increasingly important medium for tobacco companies to promote and differentiate their products.<sup>27 28</sup> Although Singapore's market for flavour capsule cigarettes is still small (2.8% of the total tobacco market share in 2018), it has grown rapidly and is projected to grow further into the 2020's.<sup>23 29</sup> The industry's increasing focus on flavour capsule variants may be part of a broader effort to maintain a perception of innovativeness in the industry amidst increasing regulation.

The industry's emphasis on flavour capsule cigarettes in Singapore is potentially problematic, due to their popularity among young people as illustrated in studies from Mexico,<sup>30</sup> the USA,<sup>31 32</sup> the UK<sup>33–35</sup> and Australia.<sup>32</sup> Menthol, the most common flavour in capsule cigarettes, masks the harshness of tobacco, facilitates smoking initiation and makes cigarettes more addictive.<sup>36</sup> Tobacco companies, aware of these effects,<sup>37–41</sup> have designed menthol cigarettes specifically to target youth.<sup>42</sup> As a result of industry marketing to young Singaporeans, Singapore's



menthol cigarette market proliferated in the 1980s and 1990s and, as at 2018, comprised half of Singapore's cigarette market.<sup>23</sup> Similarly, Singapore's capsule cigarette market may grow as tobacco companies look for new ways to target young people. It is important to monitor these trends as an evolving industry strategy, especially in countries where tobacco flavours are not regulated.

Tobacco companies are also focusing on novelty or harm reductive filter technologies including filters with menthol granules, dual capsules, recessed designs and charcoal. The industry's focus on novelty and harm reductive filters is not new; tobacco companies have touted such filters for decades in a bid to renew interest and allay smokers' health concerns while aware that these filters are inherently defective.<sup>43</sup> Research also suggests that some filter designs, notably those containing charcoal, may compound health risks due to the leakage of carbon fibres from the charcoal.<sup>44</sup> More research is needed to assess how smokers perceive novelty or harm reductive filters, and whether such product design features should be regulated.

The redesigning of existing tobacco brands in Singapore, including the use of Japanese marketing themes, may have been a broader attempt to modernise brands or generate trial among smokers in the run up to plain packaging.<sup>14 21</sup> In Singapore, Japanese products became popular with the infiltration of Japanese culture into Singapore in the 1970s and are generally perceived as high in quality, premium and trendy. This suggests that tobacco companies are using Japanese marketing themes to 'premiumise' brands, possibly to help offset the drab, unappealing image created by the plain packs or as part of a broader effort to blunt the negative impact of plain packaging on smokers' perceptions.

As in Australia and the UK,<sup>20 21 25</sup> we observed a shift towards more descriptive variant names. Singapore's plain packaging legislation permits brand and variant names at a font size of up to 5 mm and 3.5 mm, respectively, with a length of up to 50 mm and 35 mm, respectively. While descriptors that convey a reduced health risk, such as 'light', are prohibited, the legislation permits the use of colour-related descriptors such as 'silver' that may imply a reduced risk, or descriptors such as 'J-series' and 'Crafted' that may increase the appeal of the product. The legislation also permits some product differentiation, as we observed with longer packs and variations in the cigarette stick length, filter length, foil texture and foil sealing system. Monitoring such activities, in Singapore and in other countries with plain packaging, will be important in identifying loopholes and facilitating the development of other countries' plain packaging legislation.

### Limitations

Our study focused on marketing strategies using the pack and cigarette stick design; we did not examine price variations. While our lists of cigarette brands from the HSA were helpful in identifying new launches, they still showed brands that were effectively obsolete in Singapore (ie, not available in retailers). Thus, we could not verify if variants that were not available during our data collections had been discontinued or were unavailable; however, as different retailers from various locations were sourced, the lack of availability suggests that these variants were scaled down at the time of purchase. For some variants, we were unable to verify the capsule and tobacco flavour since we relied on our sense of smell to identify the scents found in the various packaging (tear tape, cellophane wrapper, foil) and product (tobacco rod, filter, capsules) elements. This made it difficult to distinguish between some flavours, especially the fruity scents.

The variant names and pack descriptors, if available, were used as a guide during these situations.

### CONCLUSION

Around the time of Singapore's plain packaging phase-in, tobacco companies launched new variants with flavour capsules, novelty filter features and new flavours, started using more descriptive variant names and redesigned existing brands, often with Japanese branding to convey a more premium product image. These developments suggest that, following plain packaging, tobacco companies will rely more on nomenclature and the cigarette stick itself, particularly flavour capsule variants, to market their products in Singapore.

### What this paper adds

- ⇒ In Australia and the UK, tobacco companies responded to plain packaging with various marketing tactics including redesigning packs, using more descriptive brand and variant names, and introducing new pack sizes, brand extensions, flavour capsule variants, filter novelties and specially designed products such as sleeves to cover up the plain packs.
- ⇒ Beyond these countries, little is known on marketing tactics tobacco companies have used to undermine plain packaging in other countries and how this may inform further regulatory efforts elsewhere.
- ⇒ This study is the first to document the tobacco industry's marketing adaptations to plain packaging in Singapore. We describe marketing strategies that are more specific to the Asia context (eg, the use of Japanese marketing themes to premiumise product image) and highlight the industry's increasing reliance on nomenclature and cigarette stick design, especially flavour capsules and novel filter features, to market their products following plain packaging.

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**Data availability statement** Data are available on reasonable request. Our data are in the form of descriptive data and photographs of cigarette packs/sticks purchased from Singapore retailers in March 2019 and March 2020. Authors can make the descriptive data and original photographs available on reasonable request.

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### REFERENCES

- 1 World Health Organization. *Plain packaging of tobacco products: evidence, design and implementation*. Geneva, 2016.
- 2 Moodie C, Hoek J, Scheffels J, et al. Plain packaging: legislative differences in Australia, France, the UK, New Zealand and Norway, and options for strengthening regulations. *Tob Control* 2019;28:485–92.
- 3 Singapore Ministry of Health. *Standardised Packaging & Enlarged Graphic Health Warnings for Tobacco Products From 1 July 2020*. Singapore, 2019.
- 4 Singapore Health Promotion Board. *Standardised packaging guidance booklet*. Singapore: Singapore Health Promotion Board, 2020.

- 5 Bansal-Travers M, Hammond D, Smith P, *et al*. The impact of cigarette pack design, descriptors, and warning labels on risk perception in the U.S. *Am J Prev Med* 2011;40:674–82.
- 6 Wakefield MA, Hayes L, Durkin S, *et al*. Introduction effects of the Australian plain packaging policy on adult smokers: a cross-sectional study. *BMJ Open* 2013;3:e003175.
- 7 Drovandi A, Teague P-A, Glass B, *et al*. A systematic review of the perceptions of adolescents on graphic health warnings and plain packaging of cigarettes. *Syst Rev* 2019;8:25.
- 8 El-Khoury Lesueur F, Bolze C, Gomajee R, *et al*. Plain tobacco packaging, increased graphic health warnings and adolescents' perceptions and initiation of smoking: DePICT, a French nationwide study. *Tob Control* 2019;28:e31–6.
- 9 Mays D, Niaura RS, Evans WD, *et al*. Cigarette packaging and health warnings: the impact of plain packaging and message framing on young smokers. *Tob Control* 2015;24:e87–92.
- 10 White V, Williams T, Wakefield M. Has the introduction of plain packaging with larger graphic health warnings changed adolescents' perceptions of cigarette packs and brands? *Tob Control* 2015;24:ii42–9.
- 11 White VM, Guerin N, Williams T, *et al*. Long-term impact of plain packaging of cigarettes with larger graphic health warnings: findings from cross-sectional surveys of Australian adolescents between 2011 and 2017. *Tob Control* 2019;28:e77–84.
- 12 Young JM, Stacey I, Dobbins TA, *et al*. Association between tobacco plain packaging and Quitline calls: a population-based, interrupted time-series analysis. *Med J Aust* 2014;200:29–32.
- 13 Kotnowski K, Hammond D. The impact of cigarette pack shape, size and opening: evidence from tobacco company documents. *Addiction* 2013;108:1658–68.
- 14 Wakefield M, Morley C, Horan JK, *et al*. The cigarette pack as image: new evidence from tobacco industry documents. *Tob Control* 2002;11(Suppl 1):i73–80.
- 15 Yaqub F. Plain packaging for tobacco products faces UK legal challenge. *Lancet Respir Med* 2015;3:511.
- 16 British American Tobacco. 1996 Departmental plans. British American Tobacco Records, 1996: 700636084–110.
- 17 British American Tobacco. Company plan 1996–1998. British American Tobacco Records, 1996: 700636015–81.
- 18 Singapore Ministry of Health. Outcome of the 2018 Public Consultation and the Government's Final Assessment. Singapore, 2018.
- 19 Greenland SJ. The Australian experience following plain packaging: the impact on tobacco branding. *Addiction* 2016;111:2248–58.
- 20 Scollo M, Ockleston J, Bayly M, *et al*. Tobacco product developments coinciding with the implementation of plain packaging in Australia. *Tob Control* 2015;24:e116–22.
- 21 Moodie C, Angus K, Mitchell D, *et al*. How tobacco companies in the United Kingdom prepared for, and responded to, standardised packaging of cigarettes and rolling tobacco. *Tob Control* 2018;27:e85–92.
- 22 Amul GGH, Pangestu Pang T. Progress in tobacco control in Singapore: lessons and challenges in the implementation of the framework convention on tobacco control. *Asia Pac Policy Stud* 2018;5:102–21.
- 23 van der Eijk Y, Lee JK, M Ling P. How menthol is key to the tobacco industry's strategy of recruiting and retaining young smokers in Singapore. *J Adolesc Health* 2019;64:347–54.
- 24 Institute for Global Tobacco Control. TPackSS: tobacco pack surveillance system photography protocol, 2013. Available: [https://www.globaltobaccocontrol.org/tpackss/sites/default/files/Field%20Collection%20Attachment\\_Photos%20Protocol.pdf](https://www.globaltobaccocontrol.org/tpackss/sites/default/files/Field%20Collection%20Attachment_Photos%20Protocol.pdf)
- 25 Scollo M, Bayly M, White S, *et al*. Tobacco product developments in the Australian market in the 4 years following plain packaging. *Tob Control* 2018;27:580–4.
- 26 Thrasher JF, Islam F, Barnoya J, *et al*. Market share for flavour capsule cigarettes is quickly growing, especially in Latin America. *Tob Control* 2017;26:468–70.
- 27 C Smith K, Washington C, Welding K, *et al*. Cigarette stick as valuable communicative real estate: a content analysis of cigarettes from 14 low-income and middle-income countries. *Tob Control* 2016;26:604–7.
- 28 Haggart K, Hoek J, Blank M-L. Flavor Capsule Variants' Performance in a "Dark Market": Implications for Standardized Packaging. *Nicotine Tob Res* 2020;22:853–6.
- 29 Euromonitor. Passport global market information database; 2020.
- 30 Abad-Vivero EN, Thrasher JF, Arillo-Santillán E, *et al*. Recall, appeal and willingness to try cigarettes with flavour capsules: assessing the impact of a tobacco product innovation among early adolescents. *Tob Control* 2016;25:e113–9.
- 31 Emond JA, Soneji S, Brunette MF, *et al*. Flavour capsule cigarette use among US adult cigarette smokers. *Tob Control* 2018;27:650–5.
- 32 Thrasher JF, Abad-Vivero EN, Moodie C, *et al*. Cigarette brands with flavour capsules in the filter: trends in use and brand perceptions among smokers in the USA, Mexico and Australia, 2012–2014. *Tob Control* 2016;25:275–83.
- 33 Moodie C, Ford A, Dobbie F, *et al*. The power of product innovation: smokers' perceptions of capsule cigarettes. *Nicotine Tob Res* 2018;20:1157–60.
- 34 Moodie C, Ford A, Mackintosh A, *et al*. Are all cigarettes just the same? Female's perceptions of slim, coloured, aromatized and capsule cigarettes. *Health Educ Res* 2015;30:1–12.
- 35 Moodie C, Mackintosh AM, Thrasher JF, *et al*. Use of cigarettes with Flavor-Changing capsules among smokers in the United Kingdom: an online survey. *Nicotine Tob Res* 2019;21:1547–55.
- 36 WHO Study Group on Tobacco Product Regulation. Advisory note: banning menthol in tobacco products. Geneva: World Health Organization, 2016.
- 37 Anderson SJ. Menthol cigarettes and smoking cessation behaviour: a review of tobacco industry documents. *Tob Control* 2011;20(Suppl 2):ii49–56.
- 38 Anderson SJ. Marketing of menthol cigarettes and consumer perceptions: a review of tobacco industry documents. *Tob Control* 2011;20(Suppl 2):ii20–8.
- 39 Ferris Wayne G, Connolly GN. Application, function, and effects of menthol in cigarettes: a survey of tobacco industry documents. *Nicotine Tob Res* 2004;6(Suppl 1):43–54.
- 40 Klausner K. Menthol cigarettes and smoking initiation: a tobacco industry perspective. *Tob Control* 2011;20(Suppl 2):ii12–19.
- 41 Kreslake JM, Wayne GF, Connolly GN. The menthol smoker: tobacco industry research on consumer sensory perception of menthol cigarettes and its role in smoking behavior. *Nicotine Tob Res* 2008;10:705–15.
- 42 Kreslake JM, Wayne GF, Alpert HR, *et al*. Tobacco industry control of menthol in cigarettes and targeting of adolescents and young adults. *Am J Public Health* 2008;98:1685–92.
- 43 Kozlowski LT, O'Connor RJ. Cigarette filter ventilation is a defective design because of misleading taste, bigger puffs, and blocked vents. *Tob Control* 2002;11(Suppl 1):i40–50.
- 44 Pauly JL, Mepani AB, Lesses JD, *et al*. Cigarettes with defective filters marketed for 40 years: what Philip Morris never told smokers. *Tob Control* 2002;11(Suppl 1):i51–61.