# Tobacco product use after the launch of a heat-not-burn alternative in Japan: results of two cross-sectional surveys



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### Introduction

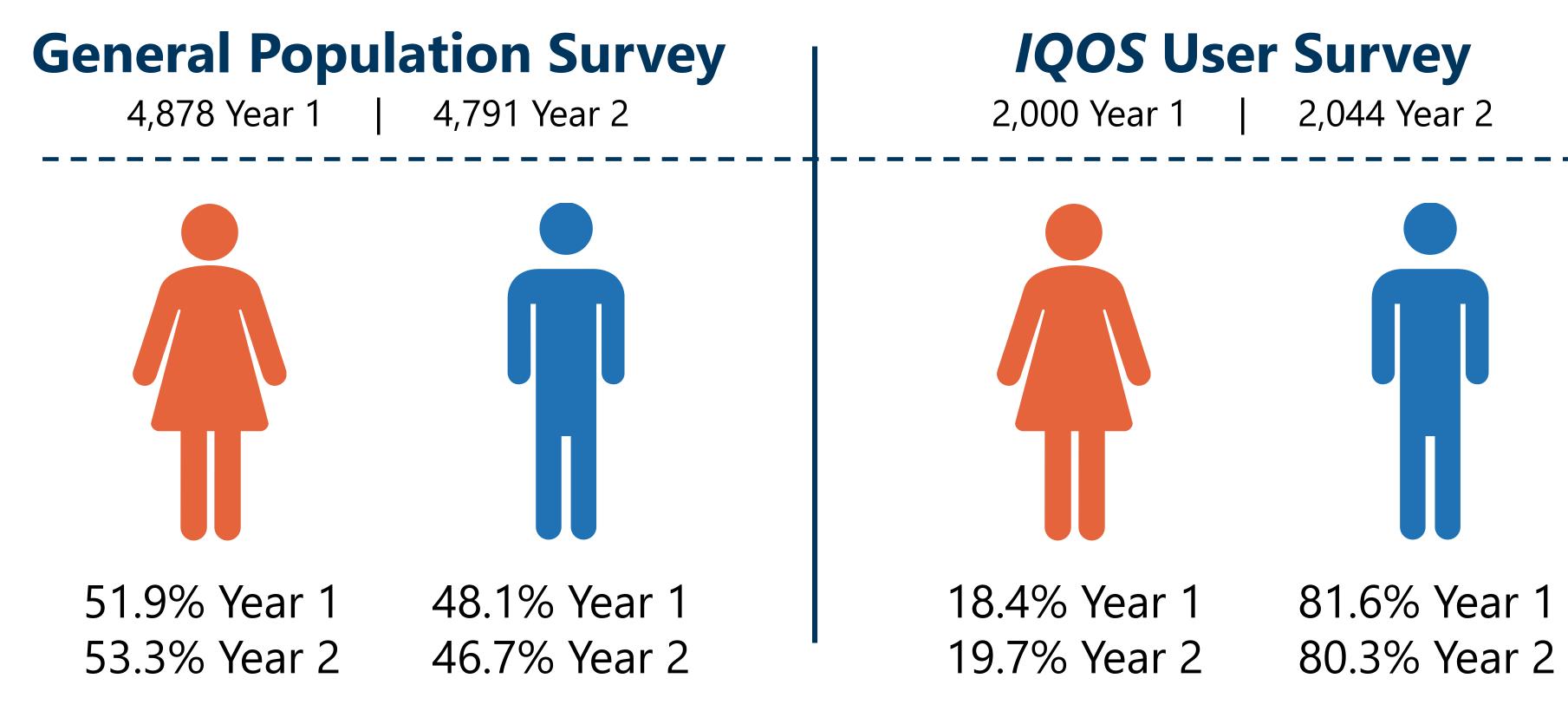
New tobacco- or nicotine-containing products (TNP) with the potential to present less risk of harm than continued smoking are being developed to advance tobacco harm reduction efforts.

The potential benefit to public health increases if more smokers who would otherwise continue to smoke transition to these products and decreases as more non-smokers (re-) initiate tobacco use with these products.

To describe prevalence and patterns of use of a new heat-non-burn TNP, IQOS®, Philip Morris International (PMI) initiated two repeated crosssectional surveys shortly after the product was nationally launched in Japan in April 2016.

The results from each of the annual surveys that were collected over the period of two years (Dec 2016–July 2018) are shown here.

# Survey design & sample



- **General Population Survey**: Door-to-door survey, paper and pencil-administered.
- **IQOS User Survey**: Online survey, randomly selected from PMI's commercial user registry.
- Current TNP user used the product for more than 100 times in his or her lifetime and was either a daily or non-daily user of the product in the past 30 days.
- Dual use is concurrent daily or non-daily use of two TNPs or poly-use of more than two TNPs.
- Demographic distribution of the General Population Survey sample was comparable to Japanese census data from 2015.

## **Key results**

- Both annual surveys collected data over four waves:
  - Year 1 waves were conducted in December 2016 and March, May, and July 2017. Year 2 waves were conducted in November 2017 and February, April, and July 2018.
- Overall TNP use increased from 18.5% in Year 1 to 18.9% in Year 2, while prevalence of cigarette smoking decreased from 17.6% to 17.3% during the same period (General Population Survey, Fig.1).
- Prevalence of IQOS use increased considerably from 1.8% in Year 1 to 3.2% in Year 2 accounting for 9.6% and 16.9%\* of TNP use (General Population Survey, Fig.1).
- Around 70% of IQOS users were using the product either exclusively or in combination with other smoke-free products, with the majority of IQOS users using IQOS exclusively (IQOS User Survey, Fig.2).
- Less than 0.1% of ex-smokers re-initiated tobacco use with IQOS in the last 12 months (ex-smoker refers to someone who stopped more than two years ago) (General Population Survey).
- First tobacco product ever used was mainly cigarettes. Only 2% or fewer initiated with IQOS (Fig. 3 and 4).
- Initiation and re-initiation of tobacco use with IQOS was minimal in both surveys and years, supporting its potential for tobacco harm reduction.

**Limitation**: Taking different samples of the population over time in repeated cross-sectional surveys allows for the analysis of aggregate changes; however, to study cohort effects (i.e., changes over time in groups of participants), longitudinal data from the same participants are needed.

### **General Population Survey**

### Figure 1. Prevalence of use

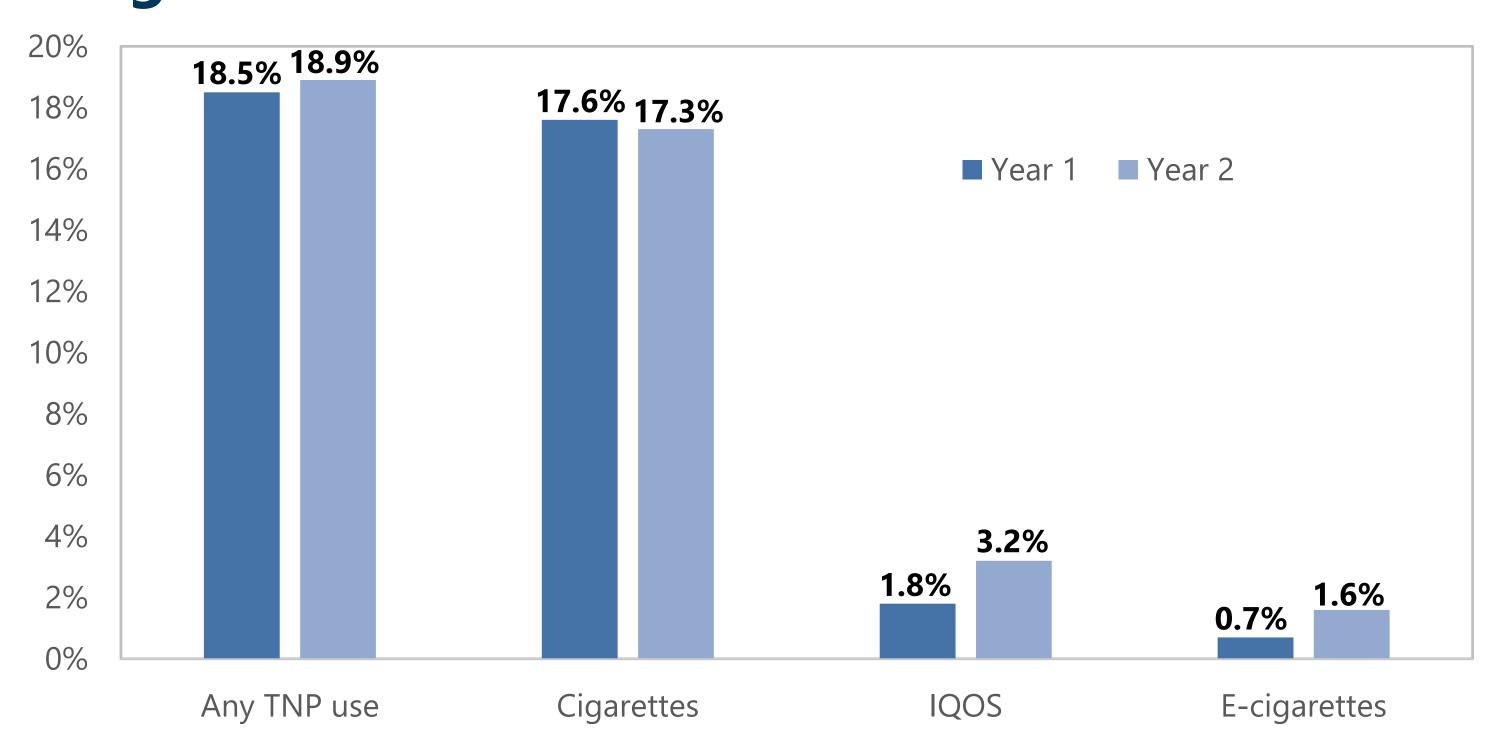
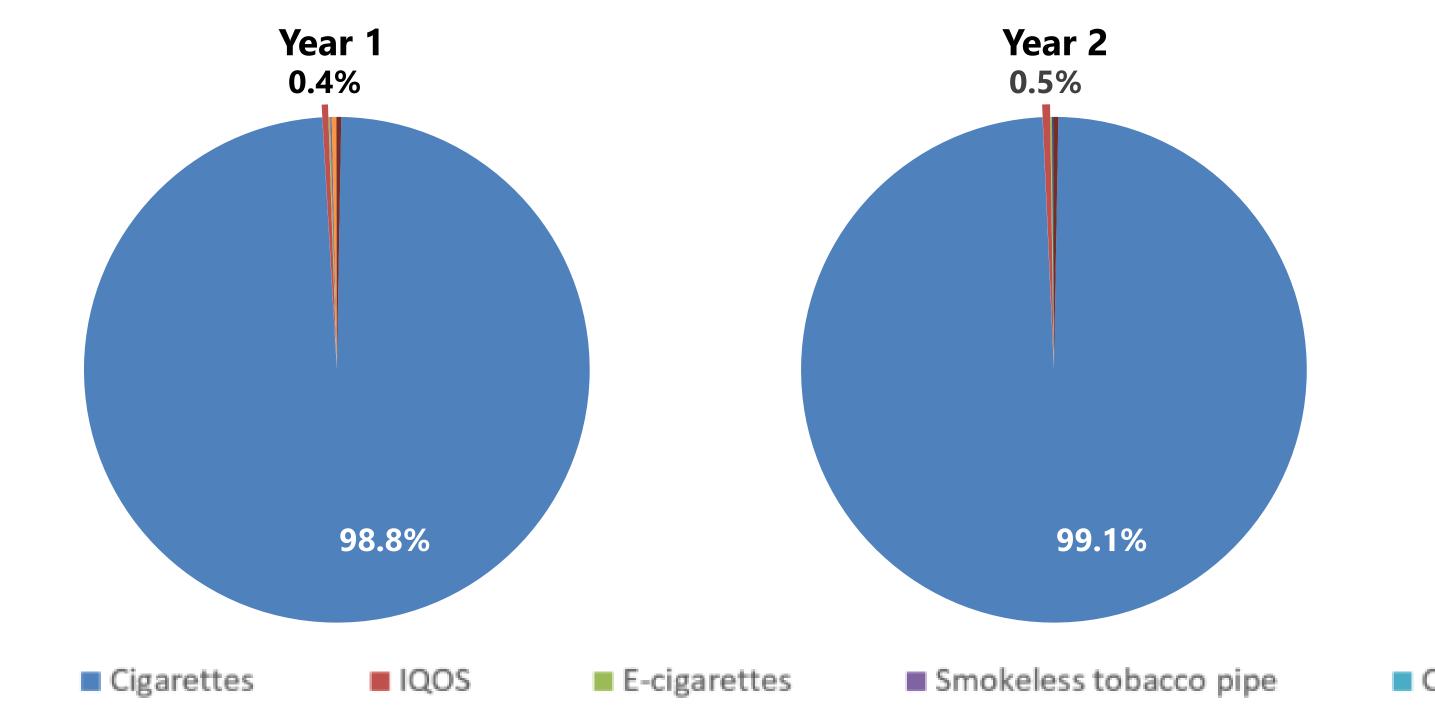


Figure 3. First product in ever tobacco users



### **IQOS** User Survey

Figure 2. Pattern of use

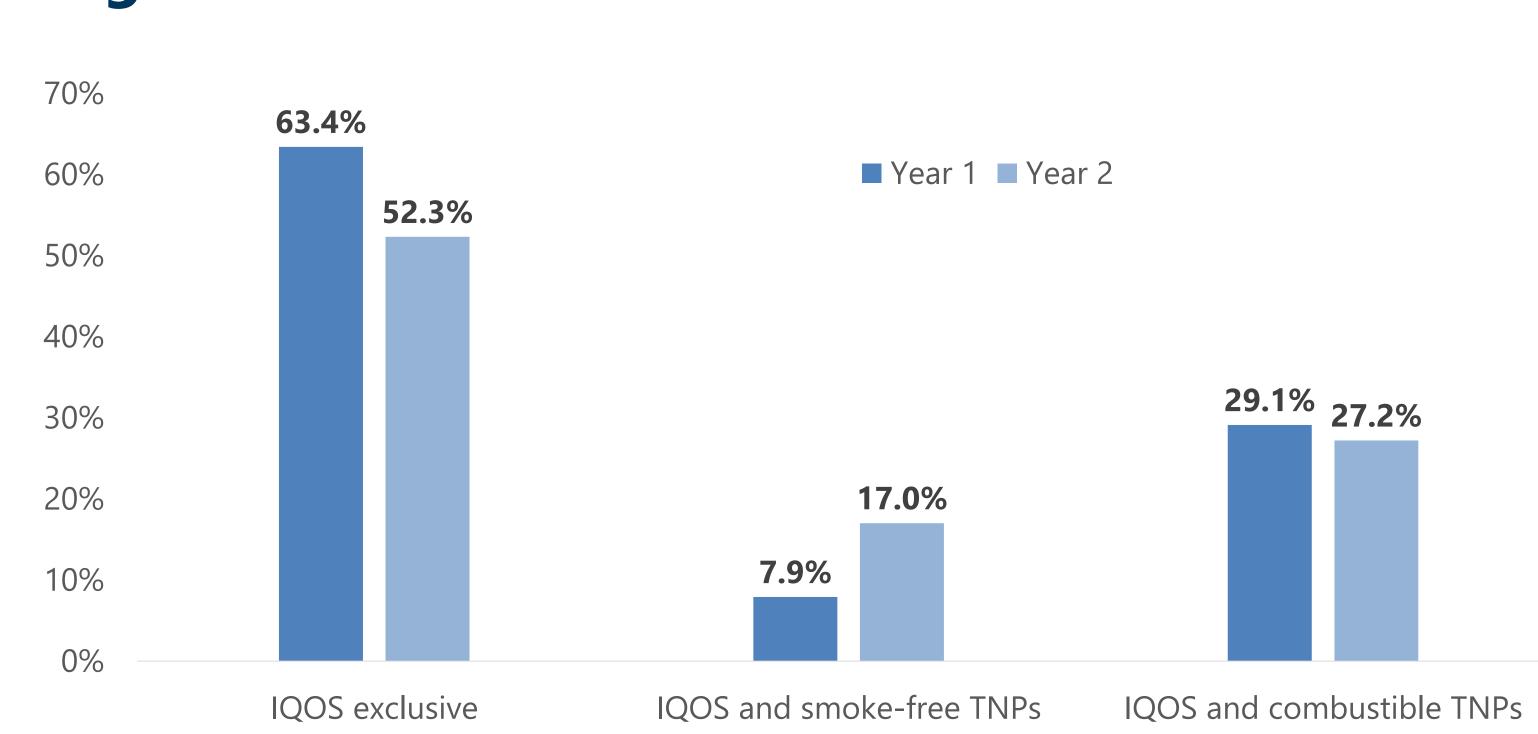


Figure 4. First product in IQOS users

