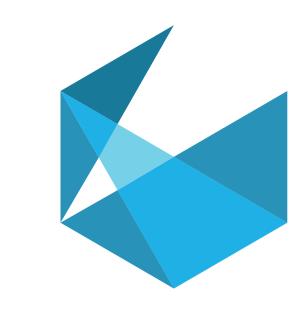
Perceived Health Risk of the Tobacco Heating System and Comparators, **Associated with Variants** of a Potential Product Brochure



F. Beacher¹, P. Magnani¹, A. Ramazzotti¹, R. Weitkunat², G. Kallischnigg³, S. Colman⁴, T. Alfieri⁴

Philip Morris International Management S.A., Lausanne,



Sample was stratified by smoking status, age, sex and city

Data were acquired by computer-assisted self-interviews

The study was approved by an Institutional Review Board

- Switzerland,
- Philip Morris Products S.A., Neuchâtel, Switzerland,
- ARGUS Statistics and Information Systems in Environment and 3 Public Health, Berlin, Germany,
- Covance Market Access Services. Gaithersburg, MD, United States 4 of America
- 1 and 2 are part of the Philip Morris International group of companies



The Tobacco Heating System (THS) is a candidate Reduced-Risk Product (RRP). A premarket assessment of an RRP's public health impact must consider the risk perceptions associated with marketing material, because risk perceptions are likely to influence use patterns.

GROUPS (FOR ALL ARMS):

- Adult Smokers with no Intention to Quit CC (S-NITQ)
- Adult Smokers with the Intention to Quit CC (S-ITQ)
- Adult Former Smokers (FS)
- Adult Never Smokers (NS)
- Young Adult Never Smokers from the legal smoking age to 25 years (LA-25 NS)

PERCEIVED HEALTH RISK:

The Perceived Health Risk was measured for THS and comparators (CC, e-cigarettes, NRTs and Cessation) using the Perceived Risk Instrument Personal Risk (PRI-P), a self-report psychometrically validated instrument developed by PMI. The instrument was composed of an 18-item Perceived Health Risk scale, producing a Rasch score between 0 (No Risk) and 100 (Very High Risk)

Three 5-arm experiments were conducted in the US. Here we present data from the two study arms on variants of a potential THS Brochure (n=943, 933, 958). The potential THS Brochure provided information on THS characteristics, risks, and the differences with cigarettes. The brochure carried a claim specific to each study and a warning, which was either a proposed PMI warning or one of the Surgeon General's four warnings

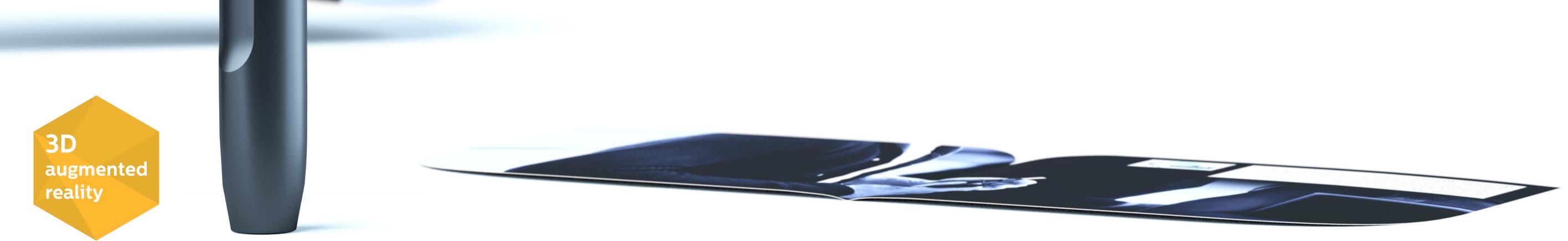
IN EACH STUDY:

- Arm 1 corresponded to: THS Brochure with one of the four Surgeon General Warnings rotated
- Arm 2 corresponded to: THS Brochure with a proposed PMI 2 Warning

The potential versions of the THS Brochure were associated with a consistent overall pattern of Perceived Health Risk, with CC being rated highest, the THS being rated next highest and NRTs and Cessation being rated lowest.

Conclusions

Methods



Results: Perceived health risk

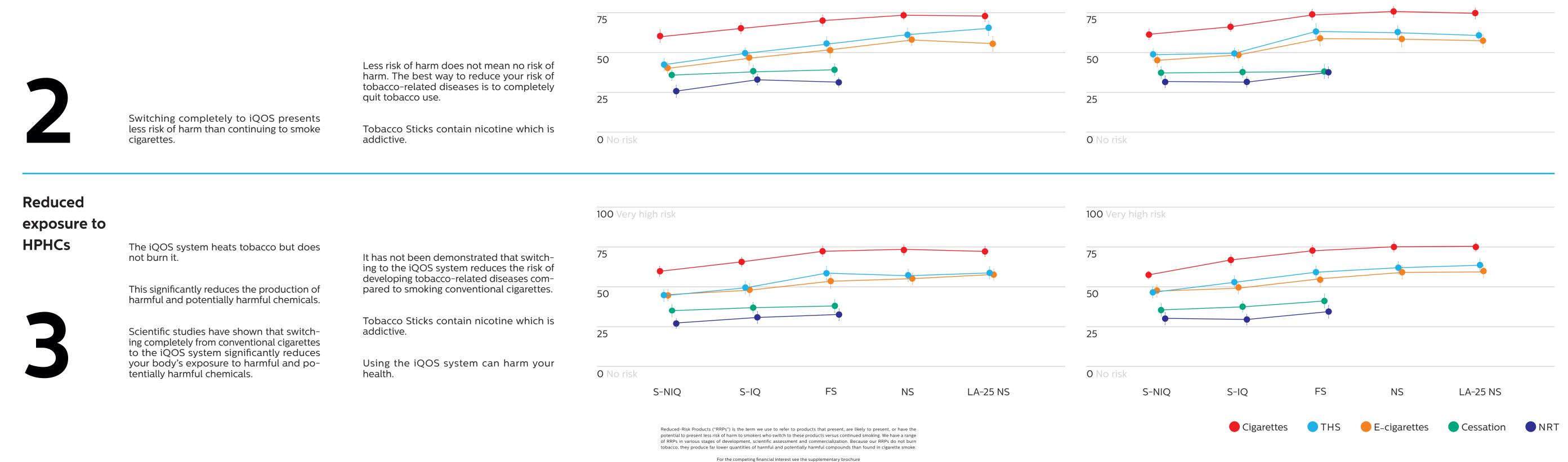
| Reduced risk of disease | Claim text | PMI Warning | THS 2.2 Brochure, SG Warning (Arm 1) | THS 2.2 Brochure, PMI Warning (Arm 2) |
|-------------------------------|---|---|--------------------------------------|---------------------------------------|
| | | | 100 Very high risk | 100 Very high risk |
| | The iQOS system heats tobacco but does not burn it. | Reduced risk does not mean no risk. | 75 | 75 |
| | This significantly reduces the production of harmful and potentially harmful chemicals. | The best way to reduce your risk of tobac- co-related diseases is to completely quit tobacco use. | | |
| | Scientific studies have shown that switch- ing completely from conventional cigarettes | Tobacco Sticks contain nicotine which is addictive. | 25 | 25 |
| | to the iQOS system can reduce the risks of tobacco-related diseases. | Using the iQOS system can harm your health. | O No risk | O No risk |

Less risk of

100 Very high risk

100 Very high risk





Global Forum on Nicotine June 15–17, Warsaw, Poland



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- 3 ARGUS Statistics and Information Systems in Environment and Public Health, Berlin, Germany,
- 4 Covance Market Access Services. Gaithersburg, MD, United States of America 1 and 2 are part of the Philip Morris International group of companies

Introduction and Objectives

The Tobacco Heating System (THS) is a candidate Reduced-Risk Product (RRP). A premarket assessment of the public health impact of an MRTP must consider risk perceptions associated with marketing material, because risk perceptions are likely to influence patterns of use.

Method

Three 5-arm experiments were conducted in the US. Here we present data from the two study arms on variants of a potential THS Brochure (n=943, 933, 958). The potential THS Brochure provided information on THS characteristics, risks, and the differences with cigarettes. The brochure carried a claim specific to each study and a warning, which was either a proposed PMI warning or one of the four of the Surgeon General's warnings.

IN EACH STUDY:

- Arm 1 corresponded to: THS Brochure with one of the four Surgeon General's Warnings rotated
- 2 Arm 2 corresponded to: THS Brochure with a proposed PMI Warning
- 3 Sample was stratified by smoking status, age, sex and city
- 4 Data were acquired by computerassisted self interviews
- 5 Study was approved by an Institutional Review Board

GROUPS (FOR ALL ARMS):

- Adult Smokers with no Intention to Quit CC (S-NITQ)
- 2 Adult Smokers with the Intention to Quit CC (S-ITQ)
- 3 Adult Former Smokers (FS)
- 4 Adult Never Smokers (NS)
- 5 Young Adult Never Smokers from the legal smoking age to 25 years (LA-25 NS)

PERCEIVED HEALTH RISK:

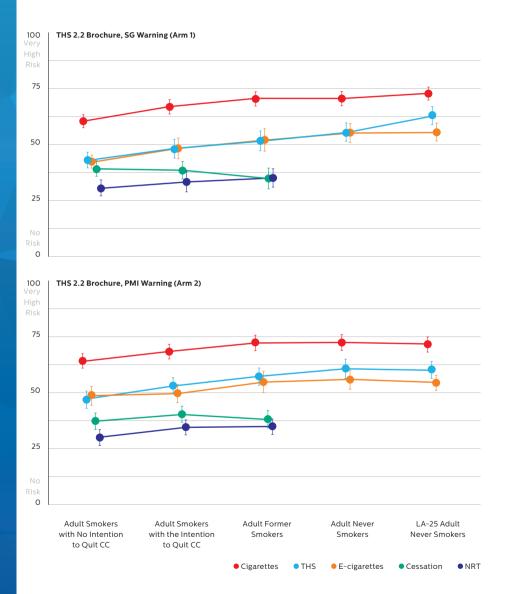
The Perceived Health Risk was measured for THS and comparators (CC, E-cigarettes, NRTs and Cessation) using the Perceived Risk Instrument Personal Risk (PRI-P), a self-report psychometrically validated instrument developed by PMI. The instrument was comprised of an 18item Perceived Health Risk scale, producing a Rasch score between 0 (No Risk) and 100 (Very High Risk).

CLAIMS OF THE DIFFERENT STUDIES

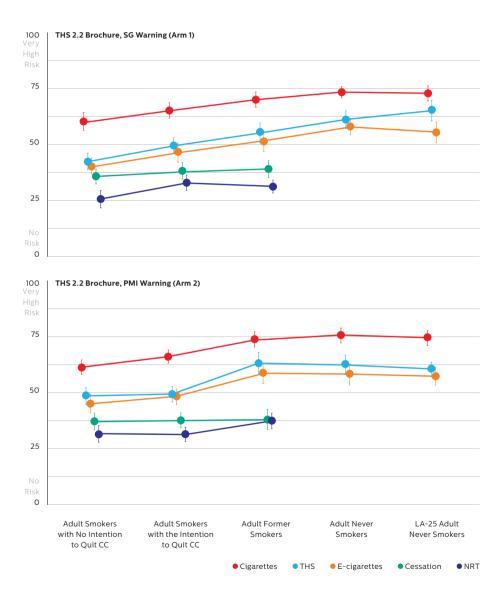
| | Study 1 | Study 2 | Study 3 | |
|---------------|---|---|---|--|
| Claim summary | Reduced risk of disease | Less risk of harm | Reduced exposure to HPHCs | |
| Claim text | The iQOS system heats tobacco but does not burn it. This significantly reduces the production of harmful and potentially harmful chemicals. Scientific studies have shown that switching completely from conventional cigarettes to the iQOS system can reduce the risks of | Switching completely to iQOS presents less risk of harm than continuing to smoke cigarettes. | The iQOS system heats tobacco but does not burn it. This significantly reduces the production of harmful and potentially harmful chemicals. Scientific studies have shown that switching completely from conventional cigarettes to the iQOS system significantly | |
| | tobacco-related diseases. | | reduces your body's exposure to harmful and potentially harmful chemicals. | |
| PMI Warning | Reduced risk does | Less risk of harm | It has not been | |
| | not mean no risk. | does not mean no risk of harm. | demonstrated | |
| | The best way to | The best way to | that switching to the iQOS system | |
| | reduce your risk of | reduce your risk of | reduces the risk | |
| | tobacco-related | tobacco-related | of developing | |
| | diseases is to | diseases is to | tobacco-related | |
| | completely quit | completely quit | diseases compared | |
| | tobacco use. | tobacco use. | to smoking conventional | |
| | Tobacco Sticks | Tobacco Sticks | cigarettes. | |
| | contain nicotine | contain nicotine | cigarettes. | |
| | which is addictive. | which is addictive. | Tobacco Sticks | |
| | | | contain nicotine | |
| | Using the iQOS | | which is addictive. | |
| | system can harm | | | |
| | your health. | | Using the iQOS | |
| | | | system can harm | |
| | 1 | 1 | your health. | |

Results

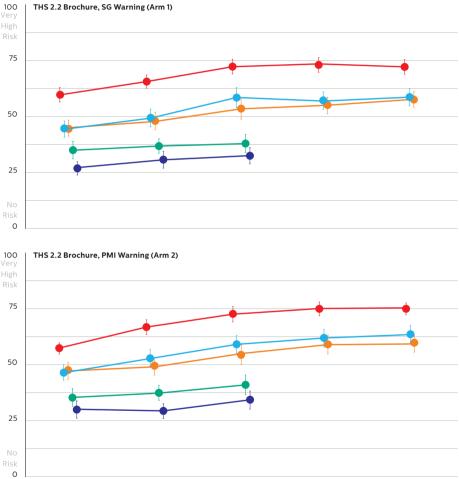
REDUCED RISKS OF TOBACCO-RELATED DISEASES CLAIM



2. REDUCED RISK OF HARM CLAIM



3 **REDUCED EXPOSURE TO HPHCS CLAIM**



Smokers

• THS

Cigarettes

Adult Smokers Adult Smokers Adult Former with No Intention with the Intention to Quit CC to Quit CC



E-cigarettes

 Cessation • NRT

Conclusions

The potential versions of the THS Brochure were associated with a consistent overall pattern of Perceived Health Risk, with CC being rated highest, the THS being rated next highest and NRTs and Cessation being rated lowest.

MORE INFORMATION



FOLLOW / PMISCIENCE



REDUCED-RISK PRODUCTS

Reduced-Risk Products ("RRPs") is the term we use to refer to products that present, are likely to present, or have the potential to present less risk of harm to smokers who switch to these products versus continued smoking. We have a range of RRPs in various stages of development, scientific assessment and commercialization. Because our RRPs do not burn tobacco, they produce far lower quantities of harmful and potentially harmful compounds than found in cigarette smoke.

COMPETING FINANCIAL INTEREST

The research described in this brochure was sponsored by the Philip Morris International group of companies

GLOBAL FORUM ON NICOTINE JUNE 15 – 17, WARSAW, POLAND