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VAPING

Driving Tobacco Harm Reduction: Real-World Outcomes with blu Electronic Vaping Product

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CORESTA PSPT 23rd October 2025

Study Rationale & Key Objectives: Delivering robust scientific evidence to substantiate the THR potential of our products

Q: Why conduct Actual Use Studies?

To **scientifically substantiate the tobacco harm reduction** potential of our **NGP products** in the real world and **contribute to consumer health**.

The consumer & their choice were at the centre of this study…

…how did it drive a deep understanding of our consumer?

Q: What were the key objectives?

1st Consumer journey:

Changes in smoking patterns

2nd Consumer experience:

What were their experiences?

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From data to insights: how we studied product use in consumers daily lives

Study method

blu bar & 2.0

We observed what happened for 6 weeks

Participants were given a **pre-paid card** allowing them **freedom of choice to use & purchase** available SKUs at preferred retail location. **No direction was given to use blu or stop smoking.**

A deep understanding of consumer journeys was gained by capturing daily choice & use: e-diaries recording use of blu and/or cigarettes, flavours, puff #, if changes in use were driven by taste/satisfaction.

Every 2 weeks insights on consumer experience were generated: capturing insights on motivation, flavour & nicotine level preferences, satisfaction, enjoyment, ease of use, risk perceptions, disposal etc.

We followed up at week 24

Final questionnaire at **week 24** to inform on the above after individuals no longer had access to free blu products & instead had to pay with their own money.

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Impact of blu on smoking behavior emerged quickly & was sustained at 24 weeks

Consumer journeys
blu bar & 2.0

blu 2.0

6 weeks →

6% quit smoking using blu

31% substantially reduced

0.7% quit smoking & blu

Total = 37%

blu bar

6 weeks →

10% quit smoking using blu

29% substantially reduced

0.2% quit smoking & blu

Total = 39%

Est. >140K fewer cigarettes smoked over 6 wks

Rapid impact: majority of smoking reduction occured at week 1

Overall Impact sustained at week 24 vs week 6

2.0:
150% increase in quitters using blu
Those who quit smoking & using blu role 10 fold

bar:
40% increase in quitters using blu
Those who quit smoking & using blu rose 50 fold

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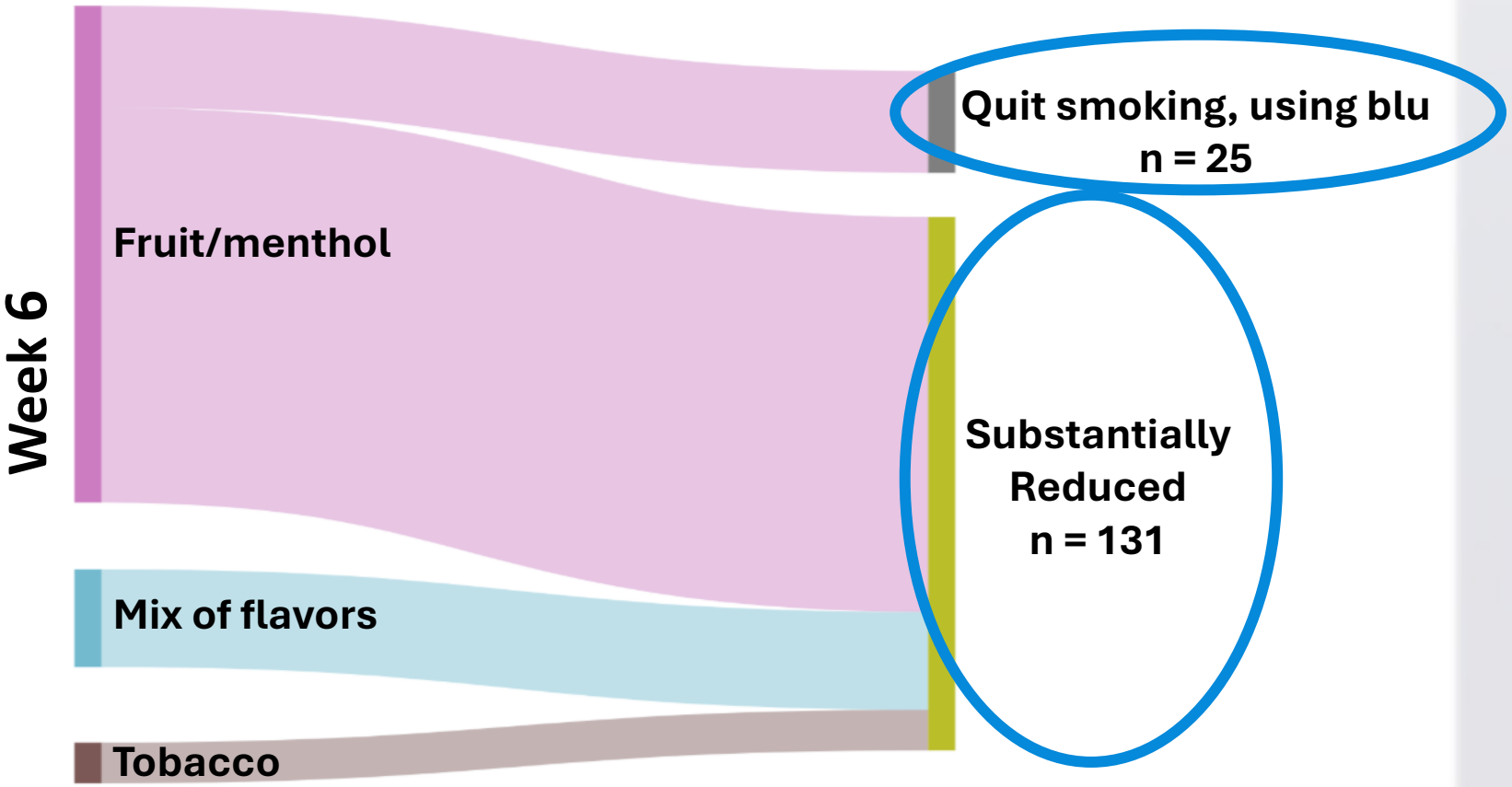
Flavours contribute to the substantial change in smoking behaviour & was exclusively used by all who quit smoking



Consumer experience

blu 2.0

ALL who **switched exclusively** used **non-tobacco Flavours**

78% of participants **switched to blu or substantially reduced cigarette smoking exclusively using non-tobacco flavours**

Flavoured Pods Were
13x MORE POPULAR
Than Golden Tobacco Pods
During Week 6

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blu 2.0 flavour preferences highlighted gender differences

Top 3 flavours for the population as a whole were **Fresh Mint**, **Blueberry Ice**, and **Berry Mix**

In general, Switchers and Reducers preferred **Fruit** flavours with **Menthol** second and **Tobacco** nearly absent

Those that reported no change in the CPD* preferred **Menthol flavours**

*CPD = Cigarettes per Day

Males

Females

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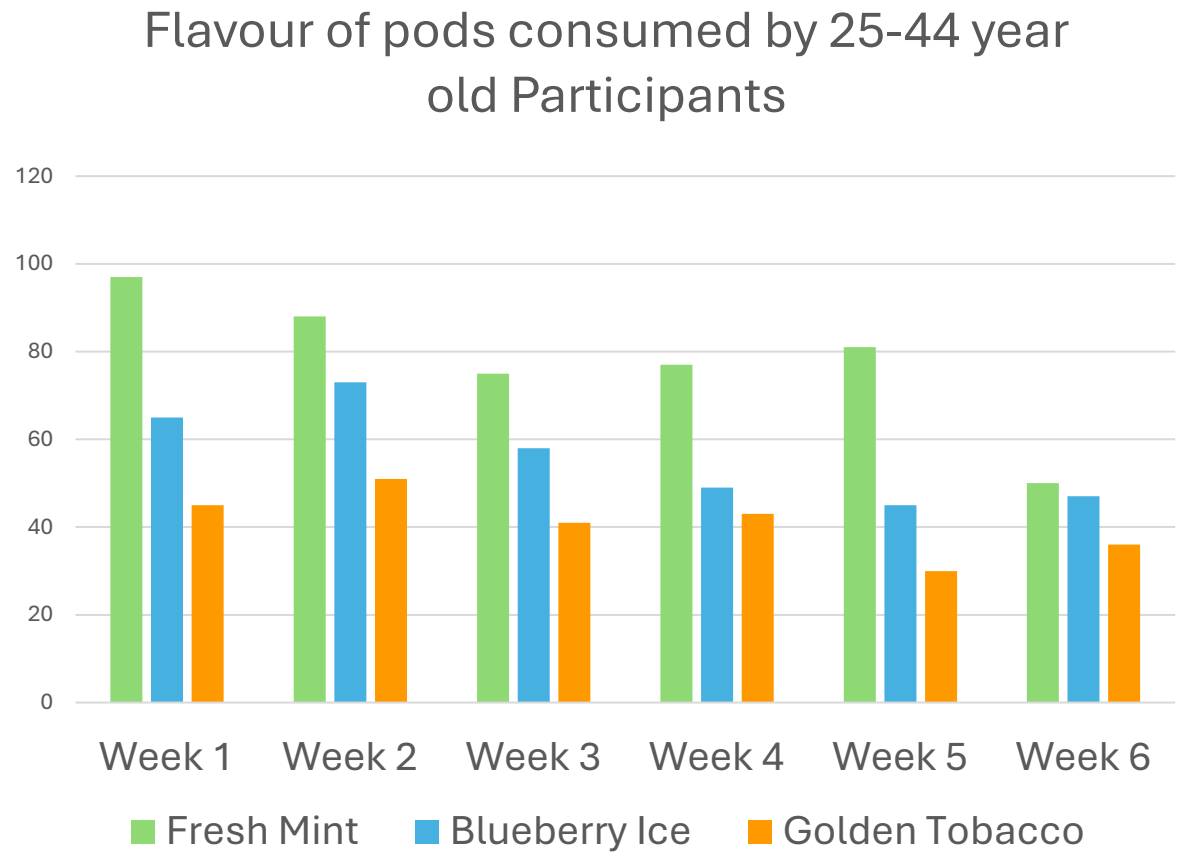
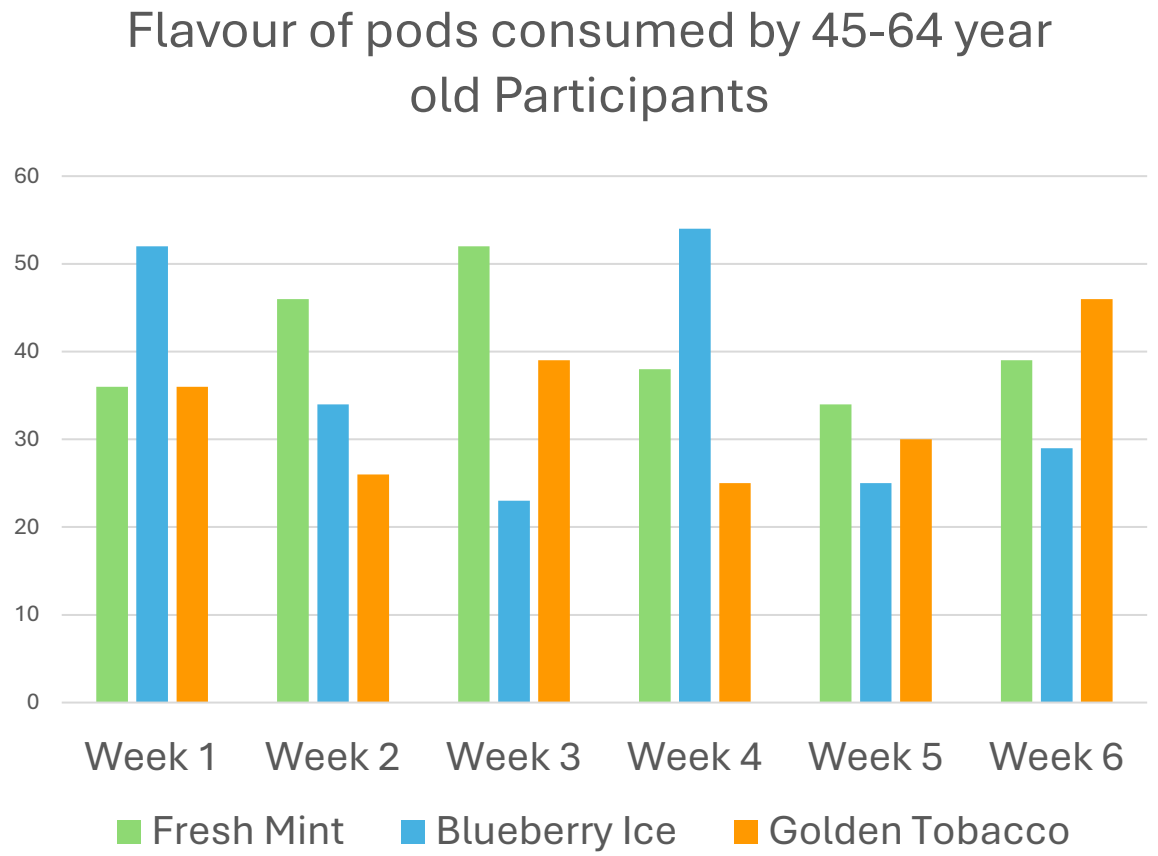
Differing Preferences were also Observed for Different Age Groups





Participants aged 19-24 consumed **Fresh Mint** pods most often, with those aged 25-44 consuming **Fresh Mint** and **Blueberry Ice**. Participants aged **45-64** saw an increase in **Golden Tobacco** use over time

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Similar insights were observed in the blu bar study indicating the range of flavours helps to support transitioning

Banana Ice was the most consumed flavour, followed by **Blueberry Ice**, **Blueberry Sour Razz**, and **Strawberry Ice**

Flavour use by Males showed distinct flavour preferences with **Banana Ice** (Weeks 1 and 2), **Kiwi Passionfruit** (Weeks 2 and 3) and **Blueberry Sour Razz** (Weeks 4-6) showing high use

Females displayed **higher variation** week to week, indicating more **flavour experimentation**

19–24 years: Lightest usage group, with no dominant, consistent flavor
25–44 years: Top 4 flavors: **Banana Ice, Blueberry Ice, Kiwi Passionfruit** and **Strawberry Ice**
45 years and older: Top 4 flavors: **Banana Ice, Kiwi Passionfruit, Blueberry Sour Razz** and **Grape Ice**

Positive purchase intentions

Range of flavours

Exclusive blu users → Substantial reducers ↷

Consumed a wider variety of flavours, more often & more intensely.

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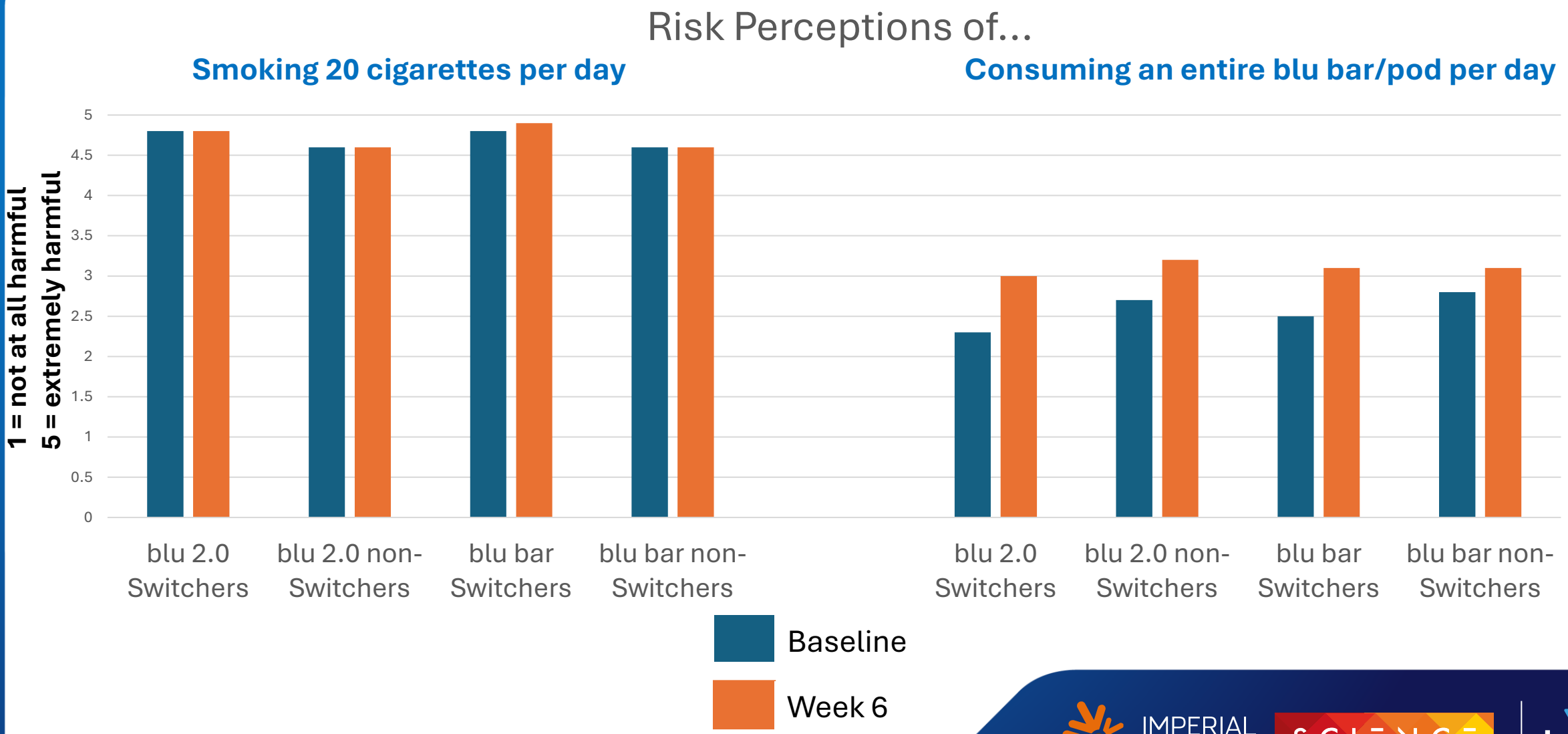
Switchers and non-switchers did not significantly differ in relative risk perceptions



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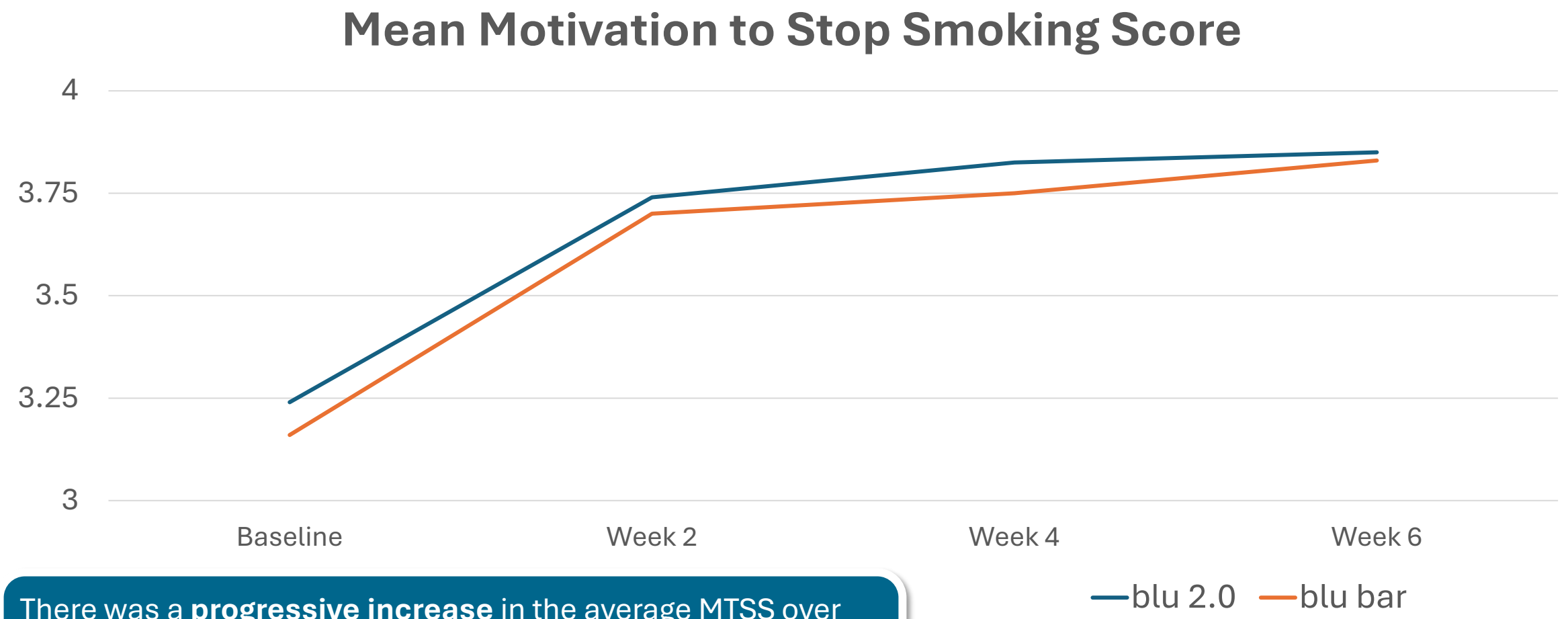
Motivation to Stop Smoking increased over the observation period



There was a **progressive increase** in the average MTSS over the 6-week period, with the **most significant rise** occurring **between Baseline and Week 2**.

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A regression model was used to identify change in CPD relative to baseline

blu 2.0

6 weeks

Motivation to Stop Smoking

Urge to Smoke

Relief from Cravings

blu bar

6 weeks

Puffs per day

Motivation to Stop Smoking

Urge to Smoke

Risk Perceptions

Relief from Cravings

Satisfaction

All of these variables were able to significantly predict change in CPD at week 6 relative to baseline

The regression model was repeated using the week 24 data and a new set of variables were significant predictors of change in CPD

<u>blu 2.0</u>
Relief from Cravings a significant predictor of change in CPD

<u>blu bar</u>
Puffs per day and Urge to Smoke were both significant predictors of change in CPD

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Exploring differences between age groups

	blu 2.0	blu bar
Puffs per day (PPD)	Highest PPD among 45-64 age group	Highest PPD among 45+ age group
Perceptions of Harm	Lowest harm perceptions among participants 65+	Lowest harm perceptions among participants 45+
Relief	Significant differences in scores but no significant pairwise comparisons	Highest relief scores among participants aged 45+

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blu has significant potential to support adult smokers reduce or replace smoking

Results demonstrate consumers find blu bar and 2.0 **satisfying** and have **significant potential to help adult smokers** to completely stop or substantially reduce smoking

The broad **range of flavours** used appear to contribute to substantial changes in smoking behaviour. This may indicate **different flavours** may appeal to **different smokers** and their **differing needs**

Findings demonstrate the **significant potential** for blu to make a **meaningful contribution** to tobacco harm reduction

THANK YOU FOR YOUR ATTENTION

LinkedIn Imperial Brands Science

IMB Acknowledgements

Joe Thompson
Thomas Nahde
Matthew Stevenson
Layla Malt
Libby Clarke
Mengran Guo
Thomas Verron
Xavier Cahours

Group Science & Regulatory Affairs

Russell Burnett Research & Consultancy

Christopher Russell

CSUR Research & Consultancy

Neil McKeganey
Gabriel Barnard
Venus Marza

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