

GTNF 2015

Dynamic dialogue, expanding perspectives.

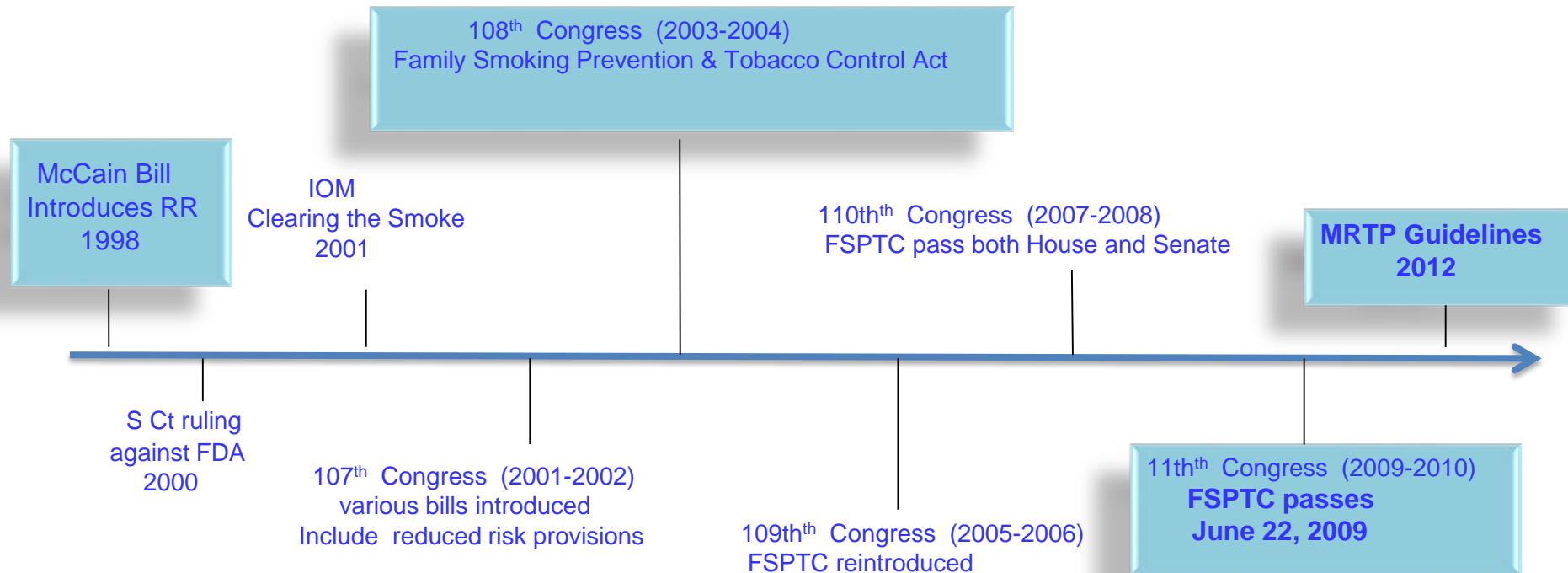
Session #9

Great Expectations: A Regulatory Perspective on Reduced Risk Products

Bruce D. Clark PhD
Philip Morris International R&D

Path to Regulation: The FDA Experience

FDA Regulations: 1998 → 2012



FDA Implementation of FSPTCA

IMPLEMENTING THE TOBACCO CONTROL ACT

CTP has authority to regulate tobacco products intended for human consumption to reduce harm across the population

- Regulate the manufacture, marketing, and distribution of cigarettes, cigarette tobacco, roll-your-own, and smokeless
- Assert jurisdiction over other products that meet the definition of a tobacco product, including e-cigarettes, cigars, and hookah



***FDA presentation at SRNT
Feb 2015***

"We should all expect further rulemaking to come once deeming has been finalized."

M. Zeller NATO conference 2015

M RTP DRAFT Guidance: FDA Authorization

BACKGROUND

In order for a Modified Risk Tobacco Product to be legally introduced or delivered for introduction into interstate commerce:

***FDA presentation at SRNT
Feb 2015***

- An application must be filed with FDA; and
- FDA must issue an order under section 911(g) with respect to such product allowing it to be introduced or delivered for introduction into interstate commerce.

M RTP DRAFT Guidance: Classification of Authorization Orders

TYPES OF MODIFIED RISK ORDERS

Risk Modification Orders

Are for tobacco products that have been shown to significantly reduce harm and the risk of tobacco-related disease to individual tobacco users, and benefit the health of the population as a whole, taking into account both users and non-users of tobacco products. (Section 911(g)(1))

*FDA presentation at TPSAC
April 2015*

Exposure Modification Orders

Are for tobacco products that reduce or eliminate exposure to a harmful substance and for which the available scientific evidence is not sufficient to meet the standard for a risk modification order but suggests that a measurable and substantial reduction in morbidity and mortality is reasonably likely in future studies. (Section 911(g)(2))

M RTP DRAFT Guidance: Evidence Based Approach



RISK MODIFICATION ORDERS

In order for a tobacco product to make claims that the product presents a lower risk of disease, an applicant must make the demonstrations outlined in 911(g)(1):

That the product, as it is actually used by consumers:

- Will significantly reduce harm and the risk of tobacco-related disease to individual tobacco users; and
- Benefit the health of the population as a whole, taking into account both users and non-users of tobacco products.

*FDA presentation at TPSAC
April 2015*

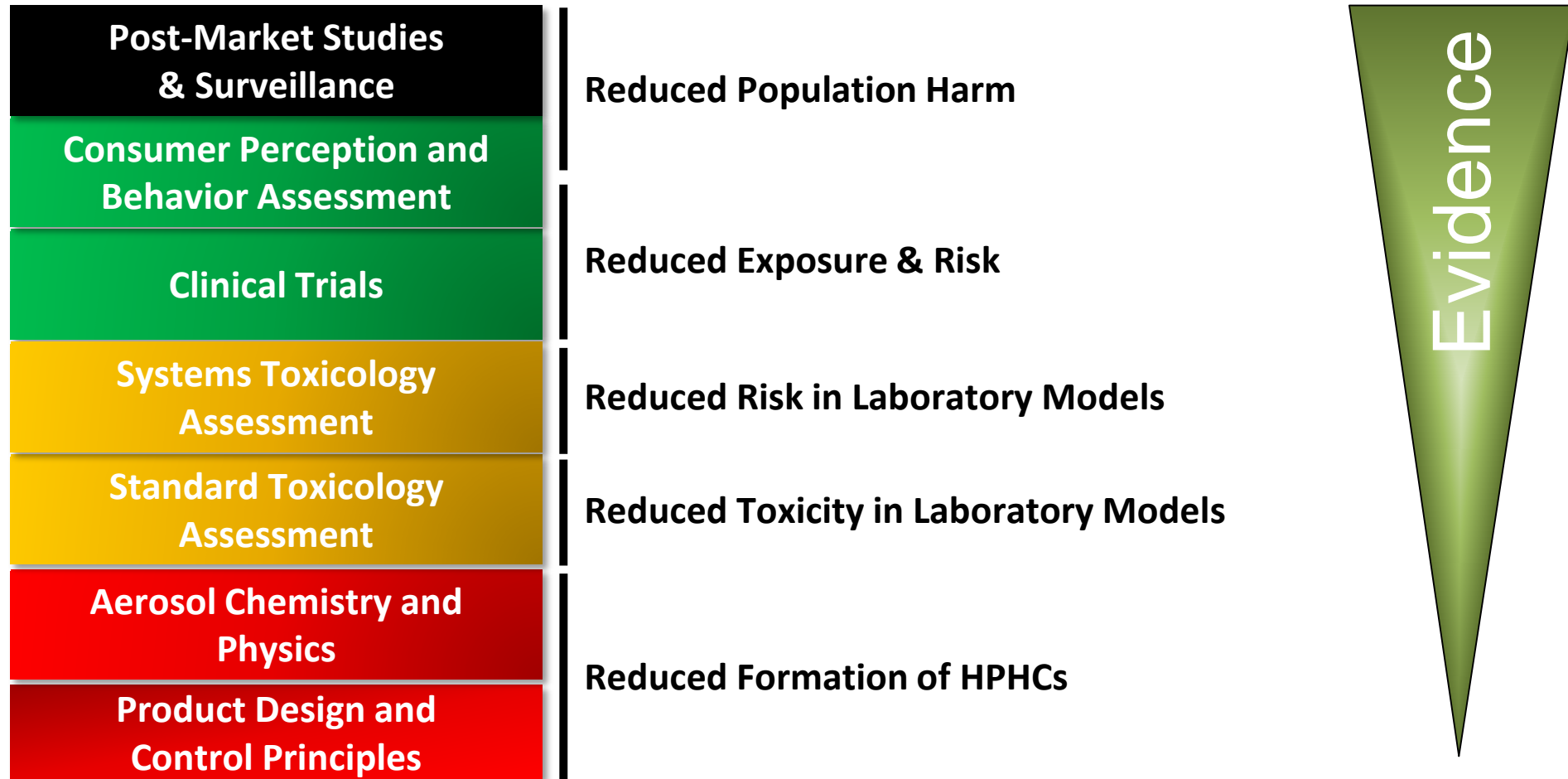
M RTP Guidance: Evidence Based Approach

FOLLOWING THE SCIENCE

- As a regulatory agency FDA can only go as far as the regulatory science can take us
- The stronger the science base the more likely we are to prevent or prevail in any litigation
- Developing a robust regulatory science program is critical to achieving programmatic success

M. Zeller at SRNT Feb 2015

PMI Evidence-based Assessment Approach



Relative Reduction of Harm / Risk

LOOKING AT NICOTINE DIFFERENTLY

- Establish an integrated, FDA-wide policy on nicotine-containing products that is public-health based
- Recognize that there is a continuum of nicotine-containing products...and the reality that people smoke for the nicotine but die from the tar
- Implications for tobacco, drug, and device regulatory policy

Potential Research:

Perceptions of disease risk of the range of nicotine-containing products

Potential Research:

Evaluation of relative toxicities across the spectrum of products

M. Zeller at SRNT Feb 2015

Relative Reduced of Harm / Risk

LOOKING AT NICOTINE DIFFERENTLY

- Related actions include:
 - Finalizing Deeming regulation
 - Developing jurisdiction policy on nicotine-containing products across FDA
 - Working with CDER and CDRH to determine how regulation of therapeutic nicotine products (Rx, OTC, drugs, devices) could evolve
 - Exploring options at CTP for an expedited premarket review policy based on principle of relative toxicity and risk
- Also has implications for HHS policies (e.g. reimbursement)

M. Zeller at Legacy's Kenneth E. Warner lecture, June 2014

"Armed with more science, yes, future regulations should take into consideration a products' place on the continuum of risk,"

Mitch Zeller NATO April 2015

Reduced Harm / Risk: Science and Behavior

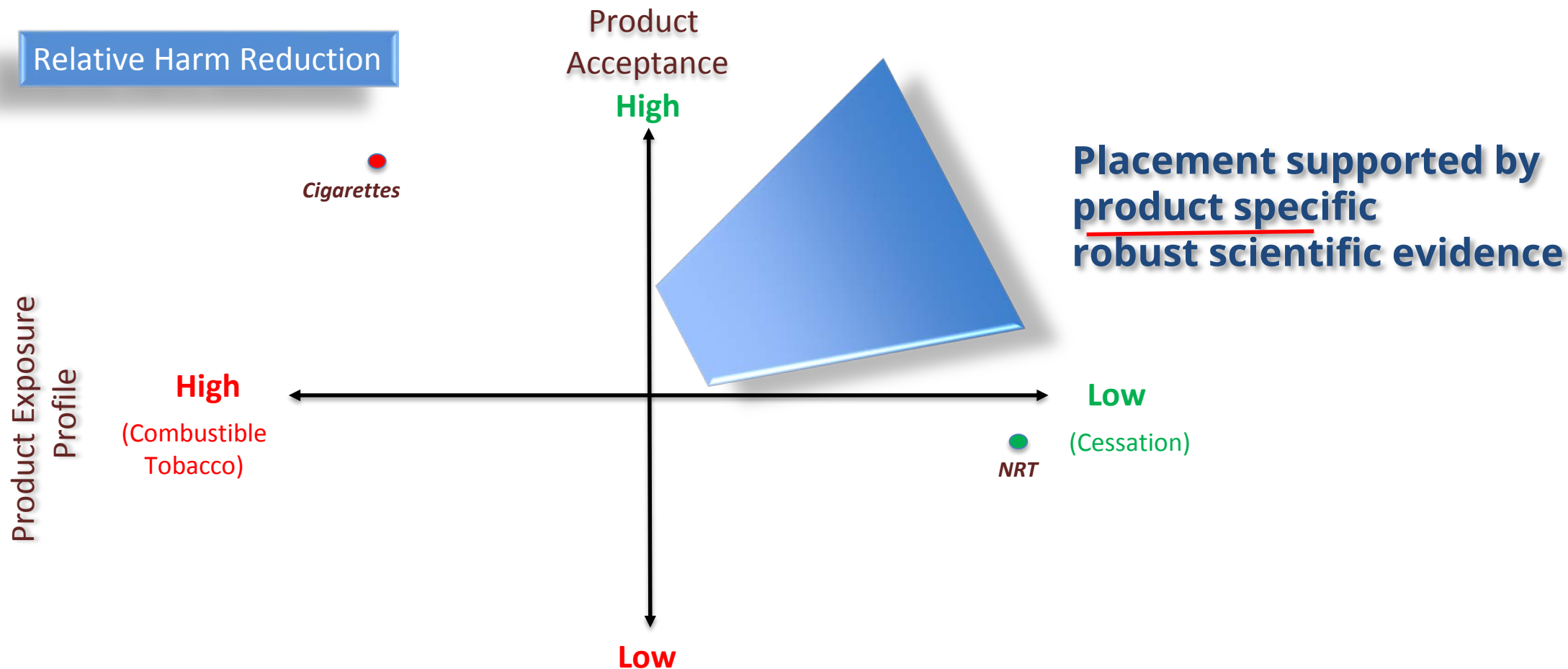


What?

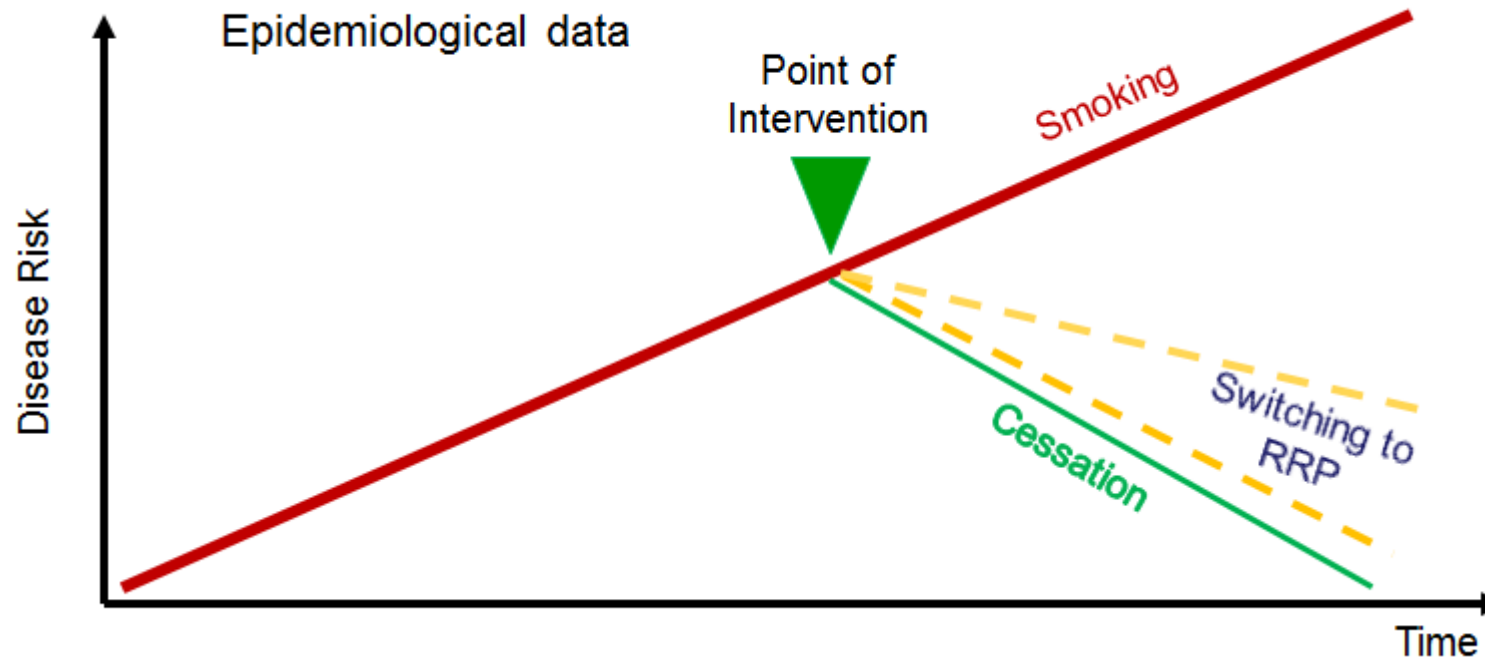
- **Exposure**
What level of reduction in exposure to harmful chemicals can be achieved compared to continued cigarette smoking?
- **Risk / Harm**
What level of reduction can be achieved compared to continued cigarette smoking?

How?

- **Acceptability**
Is the product acceptable to adult smokers and not appealing to non-smokers?
- **Behavior**
Are smokers willing to fully (or predominantly) switch to the product?



Reduced Harm / Risk: Cessation Benchmark



PROTECTING CONSUMERS



As the regulatory gatekeeper, CTP now stands between tobacco products and consumers

M. Zeller at Legacy Kenneth E. Warner lecture, June 2014

What About the Consumer?

- Meeting a population harm reduction objective is not possible without accurate (evidence-based) consumer communications
 - Truthful and not misleading
 - Understood by the consumer
- Without appropriate communication?

August 2015 report by Public Health England*

“Over the last year there has been an overall shift among adults & youth towards the inaccurate perception of e-cigarettes as at least as harmful as cigarettes”

Leads them to state:

“The latest evidence will be considered in the next tobacco control plan for England... a view to maximizing the potential of e-cigarettes as a route out of ‘smoking’ and minimizing the risk of them acting as a route into smoking”

*E-cigarettes: a new foundation for evidence based policy and practice. Public Health England August 2015

Divergence of Regulatory Opinion Globally

1. Many countries prohibit e-cigarettes
2. Singapore banned all tobacco and nicotine “novel and emerging products”
3. Concept of harm reduction emerging primarily in the US and EU
4. Developments in the US, including any product approval, has the potential to influence regulatory agenda in other countries

Challenges of Emerging Regulation

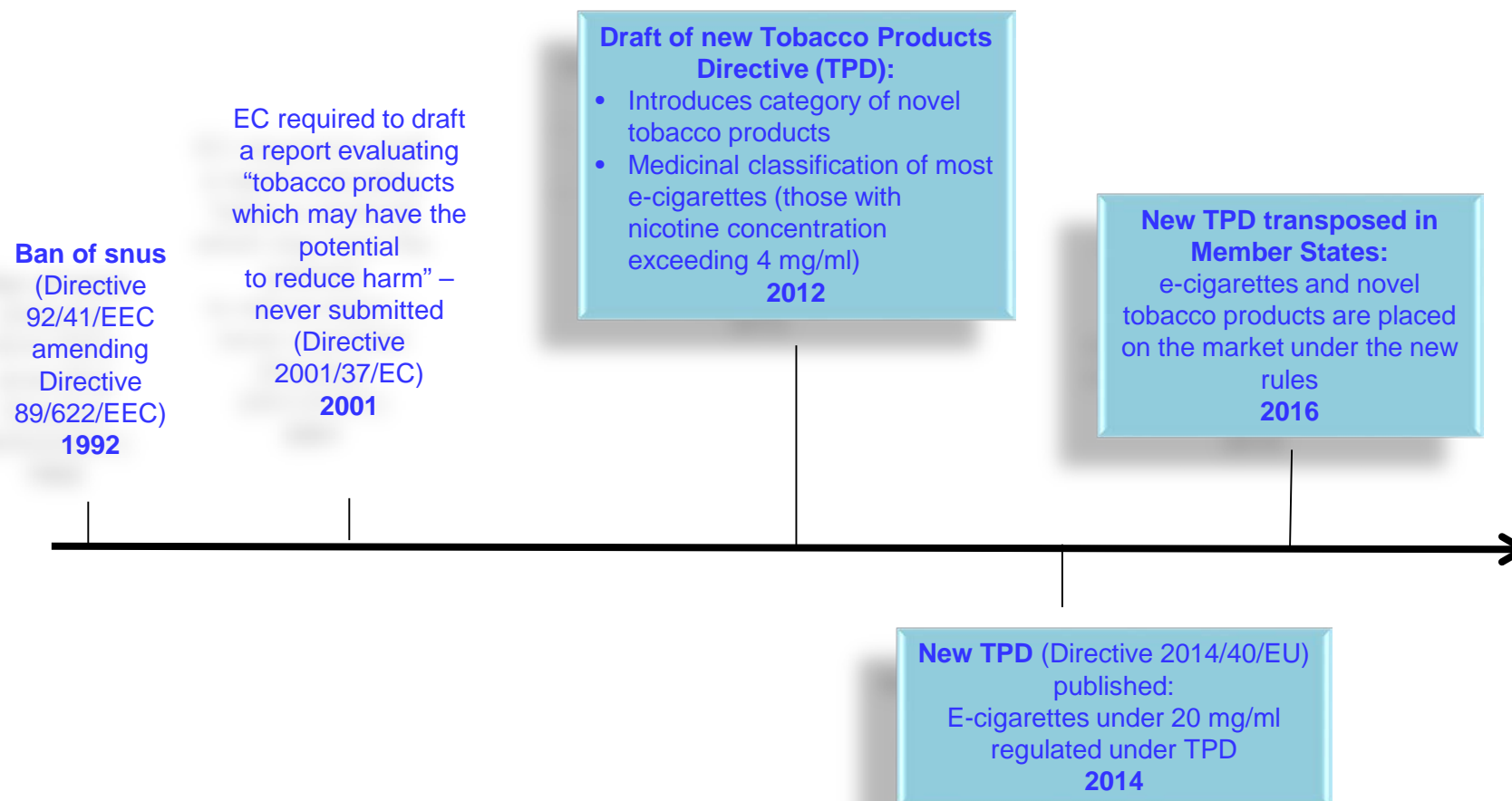
1. Marketing authorization / notification
2. Standards of evidence
3. Claims or consumer communications
4. Post-marketing observation
5. Re-authorization or renewal

EU Tobacco Products Directive (TPD) : Novel Tobacco Products

1. Pre-market Notification vs Authorization
2. Data requirement has limited commonalities with US framework:
 1. Evidence of the product impact on initiation and cessation
 2. Provision of data on consumer perception
3. Risk/benefit analysis
4. No specific standards established
5. Member States must implement by May 2016

Path to Regulation: The EU Experience

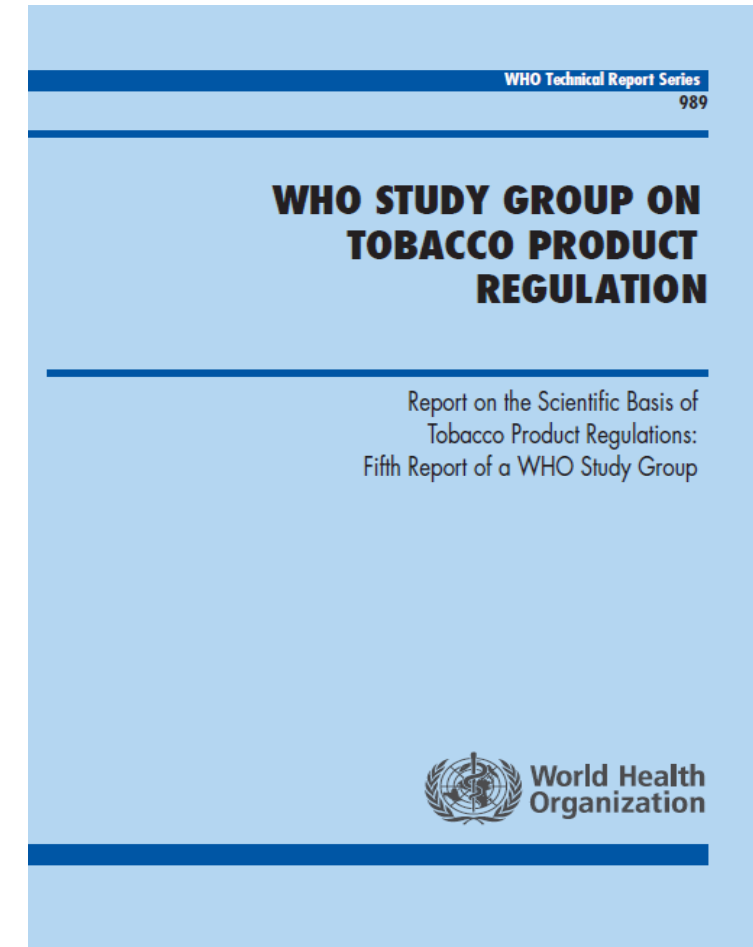
EU Tobacco Products Directive



WHO TobReg Study Group Report 2015

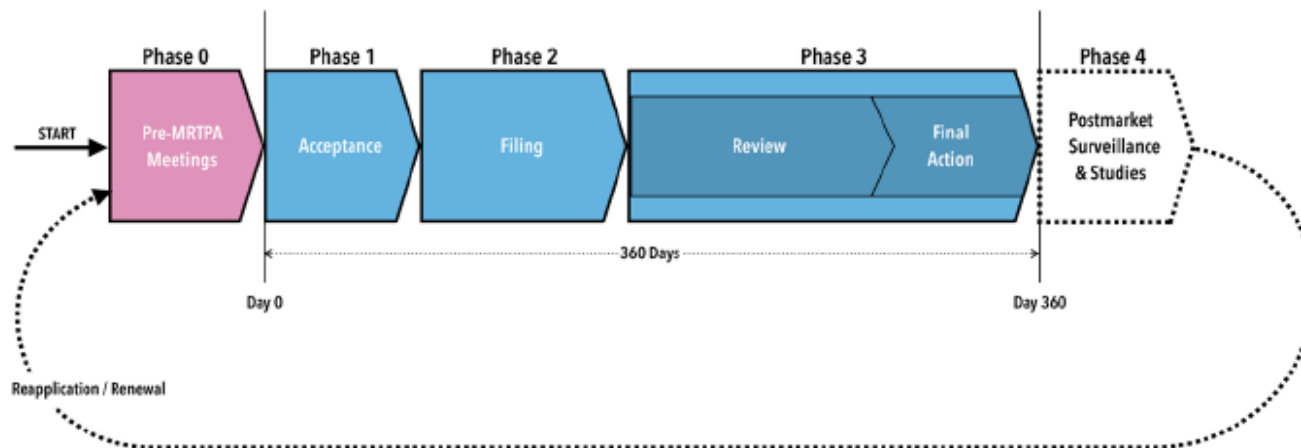
“A “harm reduction” strategy to develop tobacco products that are less toxic and addictive could be an effective element of a comprehensive approach to reducing tobacco-related deaths and disease. Such a strategy might not only be beneficial on a population scale but might also be necessary to reduce the risk for disease of tobacco users who are unwilling or unable to break their dependence on tobacco.”

*“A notification or premarket authorization should be required for all novel products. When feasible, a regulatory body should determine which products are allowed on the market, on the basis of scientific evidence of potential public health benefit...**Regulatory strategies developed by the US Food and Drug Administration could be used as a basis for deciding on best practices.**”*



PMI Application for MRTP in the US

MRTPA REVIEW PROCESS



- Based on the assessment of the THS RRP, PMI intends to file an MRTP application to FDA in 2016

Where We Are

- Science is demonstrating that RRP can reduce exposure to HPHCs and potential for exposure-related harm
- Regulators have an obligation to facilitate development of accurate, scientifically sound information in order to enable informed consumer choice
 - Learn from years of experience of the benefits of cessation that scientifically accurate information can help consumers make the right choices
- Multiple RRP products are a certainty as technology and science evolve
- All jurisdictions should establish solid regulatory frameworks setting clear standards of scientific evidence and rules for communicating product benefits to consumers

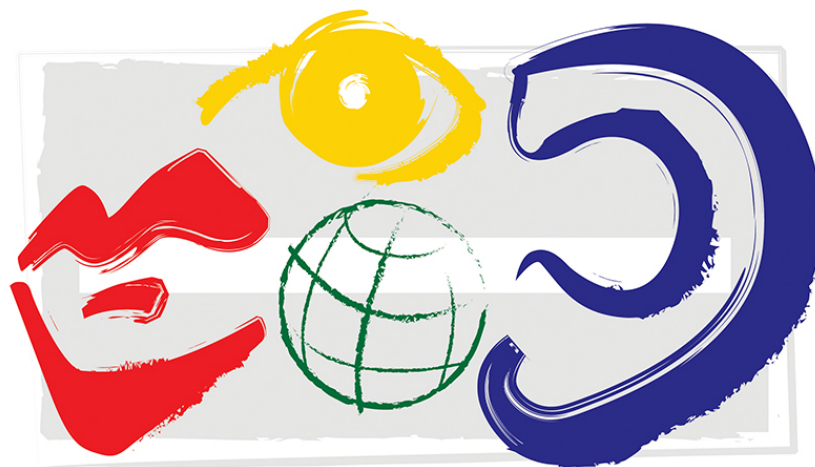


PMI SCIENCE
PHILIP MORRIS INTERNATIONAL

Reduced-Risk Products (“RRPs”) is the term the company uses to refer to products with the potential to reduce individual risk and population harm in comparison to smoking combustible cigarettes. PMI’s RRP’s are **in various stages of development and commercialization**, and we are conducting **extensive and rigorous scientific studies** to determine whether we can support claims for such products of reduced exposure to harmful and potentially harmful constituents in smoke, and ultimately claims of reduced disease risk, when **compared to smoking combustible cigarettes**.

Before making any such claims, we will need to **rigorously evaluate the full set of data** from the relevant scientific studies to determine whether they substantiate reduced exposure or risk. Any such claims **may also be subject to government review and approval**, as is the case in the US today.

Thank you



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