DIA 2019
GLOBAL ANNUAL MEETING
SAN DIEGO | JUNE 23-27

International Harmonization of Biologic Nomenclature

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@SAFEBiologics

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Philip Schneider, MS, FASHP, FFIP

- Just completed term as Vice President, International Pharmaceutical Federation (FIP)
- Recently retired as Professor/Associate Dean, University of AZ College of Pharmacy
- Past-President, American Society of Health-system Pharmacists
- Advisory Board Chair, Alliance for Safe Biologic Medicines
- Academic work focused on development of safety systems in medication use

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ASBM Meetings with FDA, Health Canada, WHO

Over the past year, ASBM has hosted three meetings with FDA and Health Canada to discuss the benefits, and importance of:

- Increasing Biosimilar Uptake
- Building Confidence in safe use of Biosimilars
- Distinct Naming as a tool to address pharmacovigilance challenges, increase confidence
- International Harmonization as a tool to promote safety and collect data
- The importance of WHO Leadership on these issues

Some Benefits of Distinguishable Naming

CLEAR PRODUCT IDENTIFICATION - Distinguishable from reference product, and other approved biosimilars.

CLEAR COMMUNICATION - between physician, patient and pharmacist

CLEAR PRESCRIBING & DISPENSING - Helps prevent inadvertent and inappropriate substitution.

BETTER PHARMACOVIGILANCE - proper attribution of adverse events.

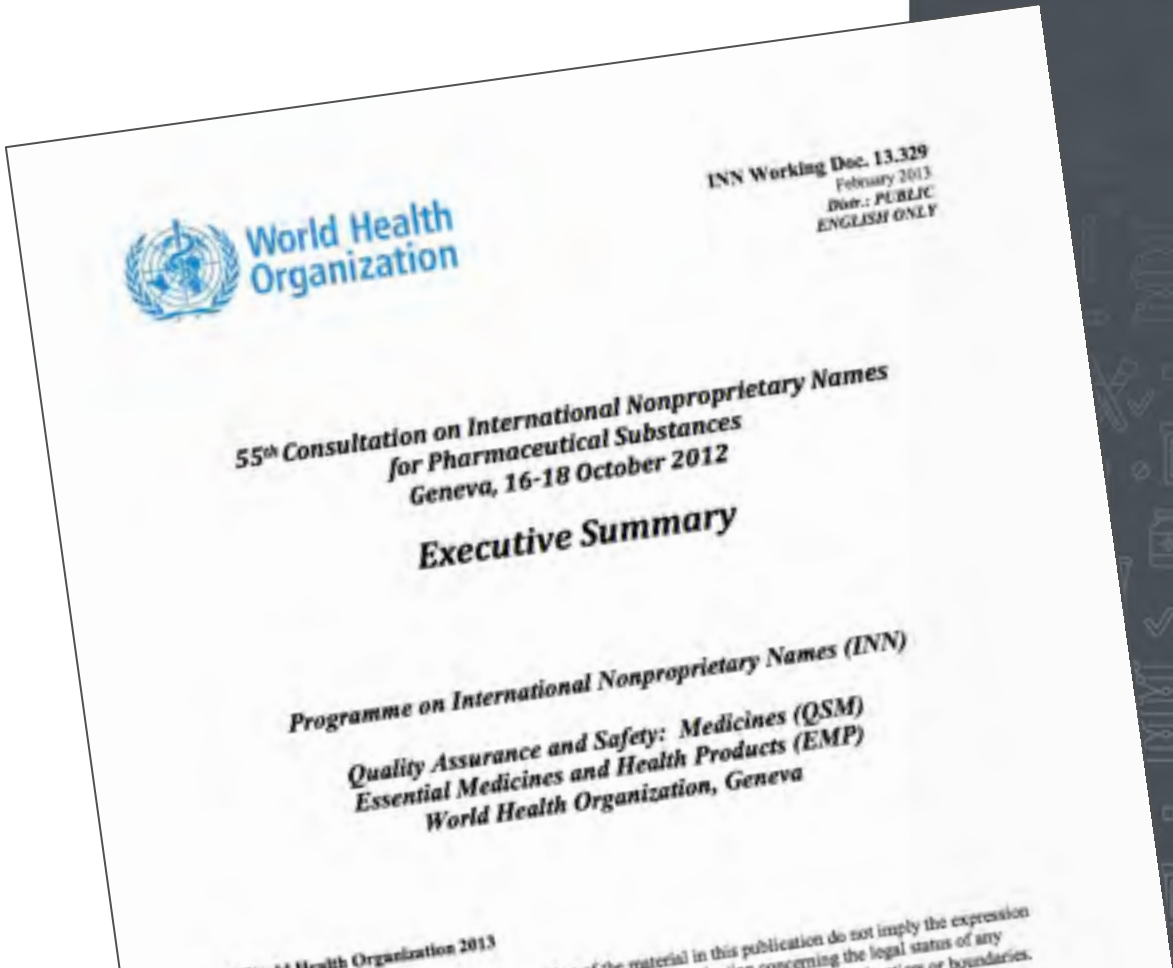
INCREASED MANUFACTURER ACCOUNTABILITY – different nonproprietary names, or shared nonproprietary names with differentiating suffixes tied to manufacturer, would accomplish this.

WHO Identified International Harmonization of Biologic Nomenclature as an Urgent Need… back in 2012.

That year, the WHO's Executive Summary of the INN Consultation said:

"The naming of SBPs **needs to be addressed globally and soon** while the number of registered SBPs remains relatively small and with the INN programme being the best forum to achieve this."

-Executive Summary, 55th INN Consultation (Oct. 2012) Published Feb. 2013


INN Working Doc. 13.329
February 2013
Distr.: PUBLIC
ENGLISH ONLY

World Health Organization

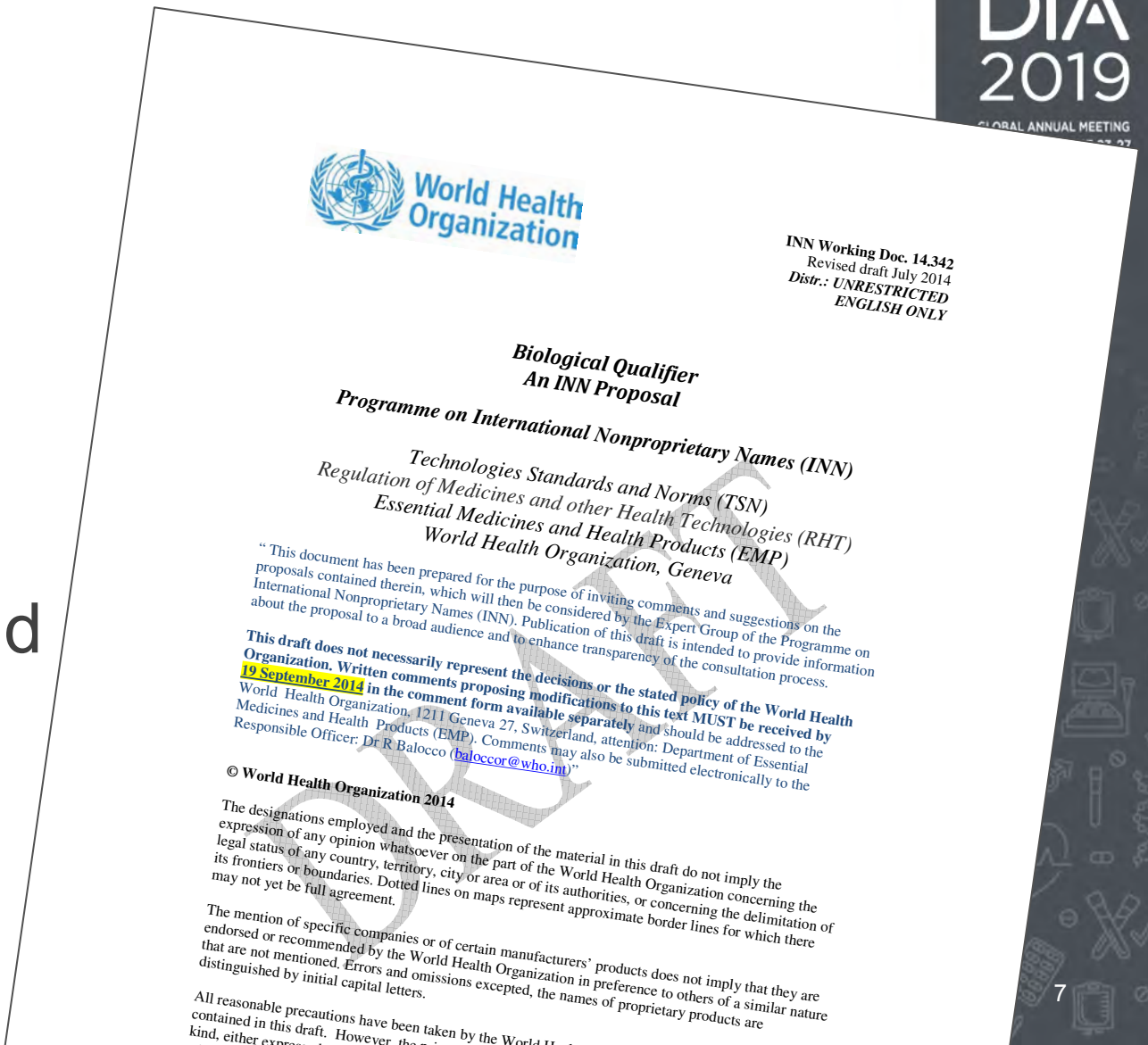
55th Consultation on International Nonproprietary Names for Pharmaceutical Substances
Geneva, 16-18 October 2012

Executive Summary

Programme on International Nonproprietary Names (INN)
Quality Assurance and Safety: Medicines (QSM)
Essential Medicines and Health Products (EMP)
World Health Organization, Geneva

The INN Expert Group Made its Recommendation in 2014…

- Requested by regulators “to avoid proliferation of separate and distinct national qualifier systems”.
- Yet after years of research on the problem; and after consultation with regulators and other stakeholders; **the INN Expert Group Recommendation remains unimplemented.**



World Health Organization

INN Working Doc. 14.342
Revised draft July 2014
Distr.: UNRESTRICTED
ENGLISH ONLY

Biological Qualifier
An INN Proposal

Programme on International Nonproprietary Names (INN)

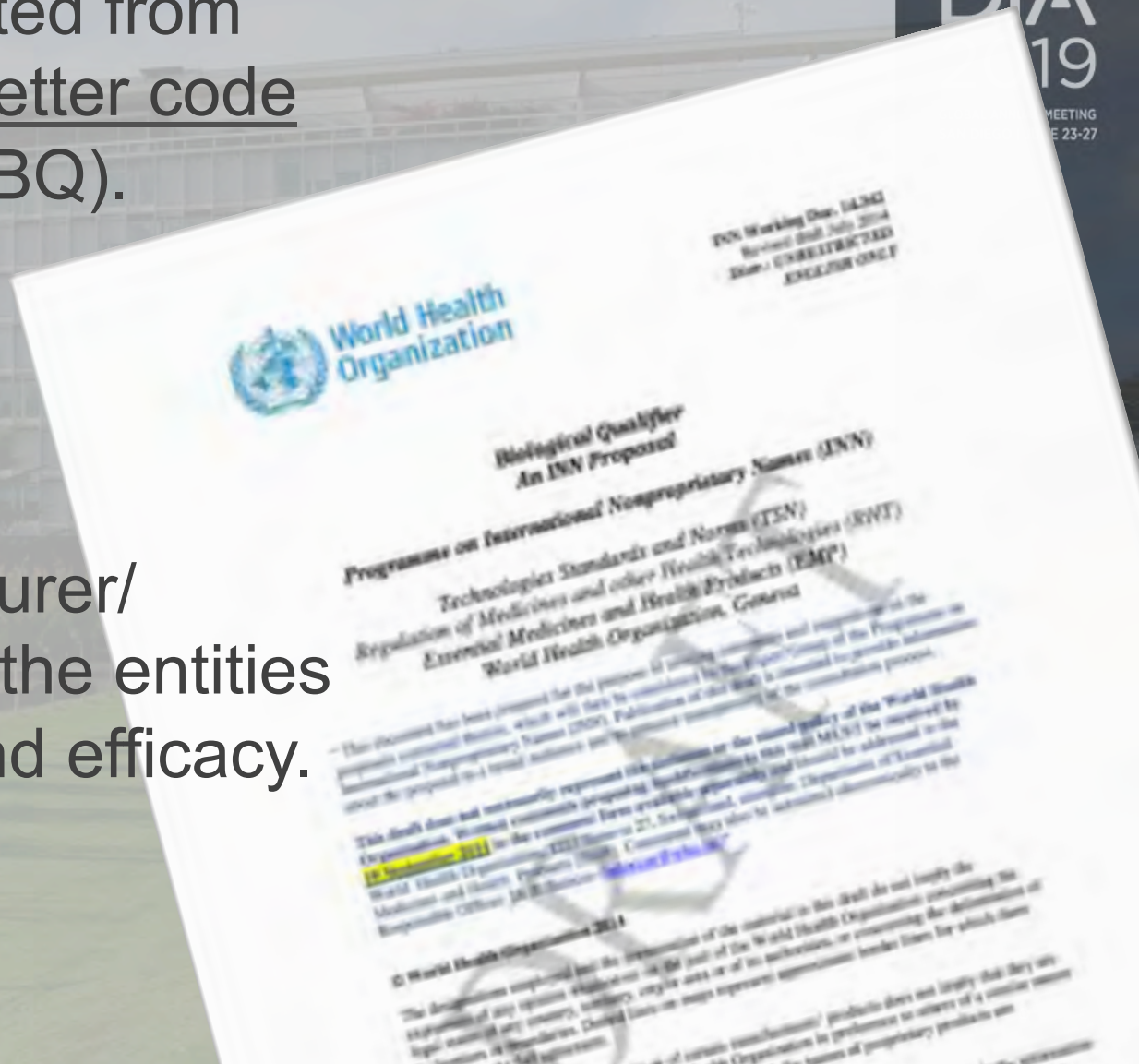
Technologies Standards and Norms (TSN)
Regulation of Medicines and other Health Technologies (RHT)
Essential Medicines and Health Products (EMP)
World Health Organization, Geneva

“ This document has been prepared for the purpose of inviting comments and suggestions on the proposals contained therein, which will then be considered by the Expert Group of the Programme on International Nonproprietary Names (INN). Publication of this draft is intended to provide information about the proposal to a broad audience and to enhance transparency of the consultation process.

This draft does not necessarily represent the decisions or the stated policy of the World Health Organization. Written comments proposing modifications to this text MUST be received by 19 September 2014 in the comment form available separately and should be addressed to the World Health Organization, 1211 Geneva 27, Switzerland, attention: Department of Essential Medicines and Health Products (EMP). Comments may also be submitted electronically to the Responsible Officer: Dr R Balocco (baloccor@who.int)”

WHO Solution: The Biological Qualifier (BQ)

- Similar biologics will be differentiated from each other by use of a random 4-letter code known as a "Biological Qualifier" (BQ).
- Codes will be appended to an INN shared by multiple products.
- Codes will be tied to the manufacturer/ marketing authorization holders – the entities responsible for product's safety and efficacy.


World Health Organization

Biological Qualifier
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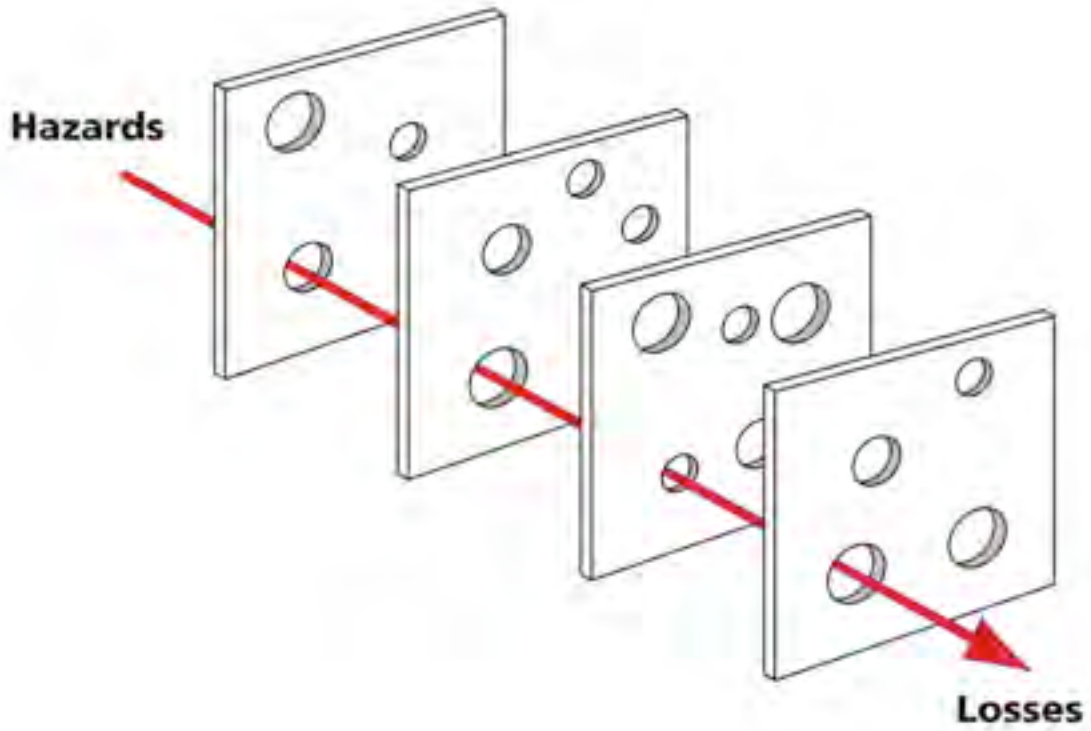
Safety Science: High Reliability Systems

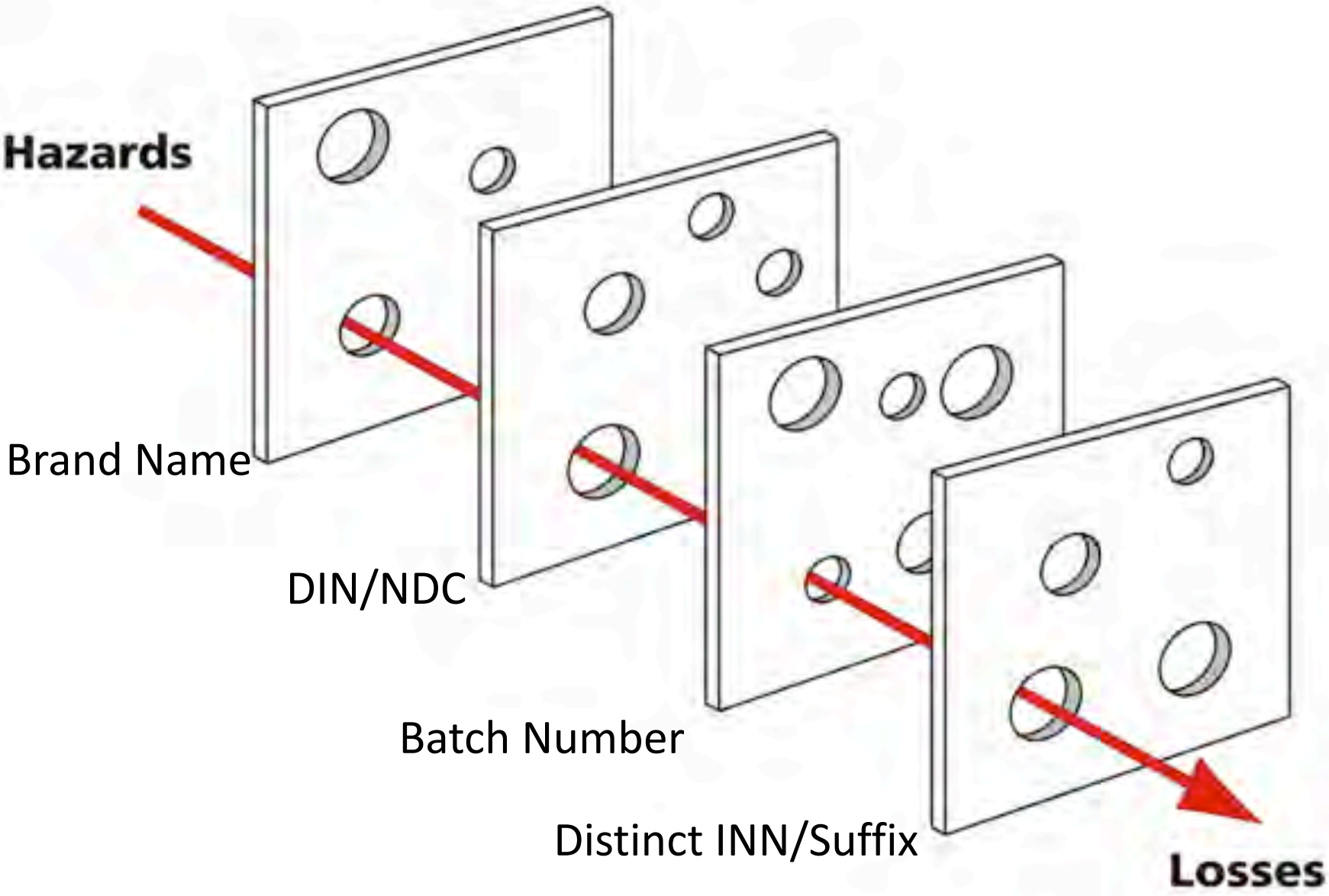
- High-reliability systems need multiple checks: Airlines, Healthcare, Medication systems.



- The “Swiss Cheese Model” from Industrial psychologist Jim Reasons is used worldwide to design high reliability safety systems.

- Each “slice” (“defense”) is a protection against hazardous conditions becoming an accident.

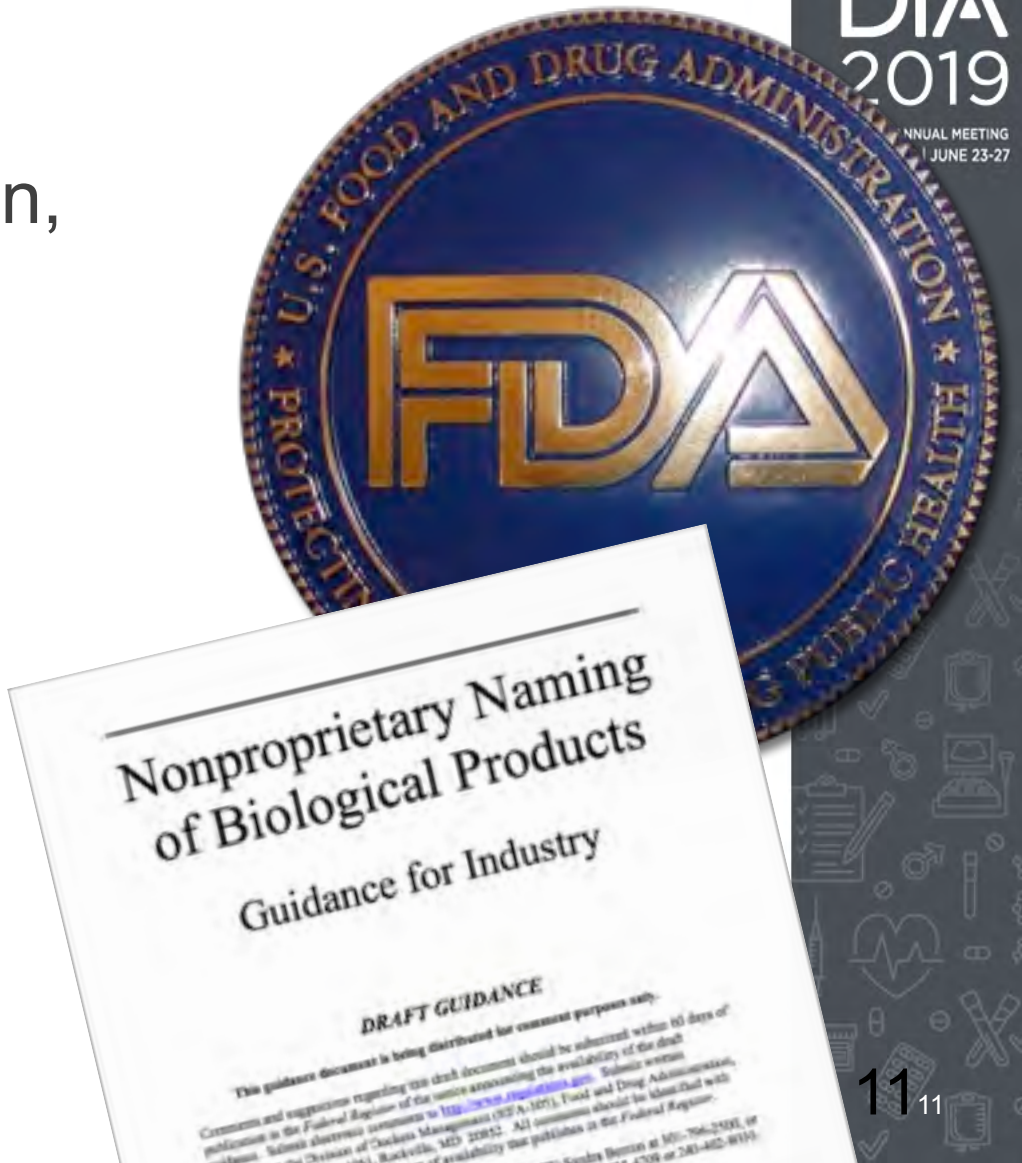
“Defenses” in Identification of Biologic Medicines



FDA Implements its Own Suffix System

- In absence of WHO implementation of the INN Expert Group's recommendation, the FDA introduced its own, similar 4-letter suffix system in 2015.

- While differences exist, FDA has continually expressed willingness to harmonize should the WHO implement the BQ.



WHO Leadership Remains Critical

- We know that supporters of the BQ have changed course repeatedly, as a result of WHO delay.
- We know that still others have failed to act, while waiting for WHO action.

North American Standard?

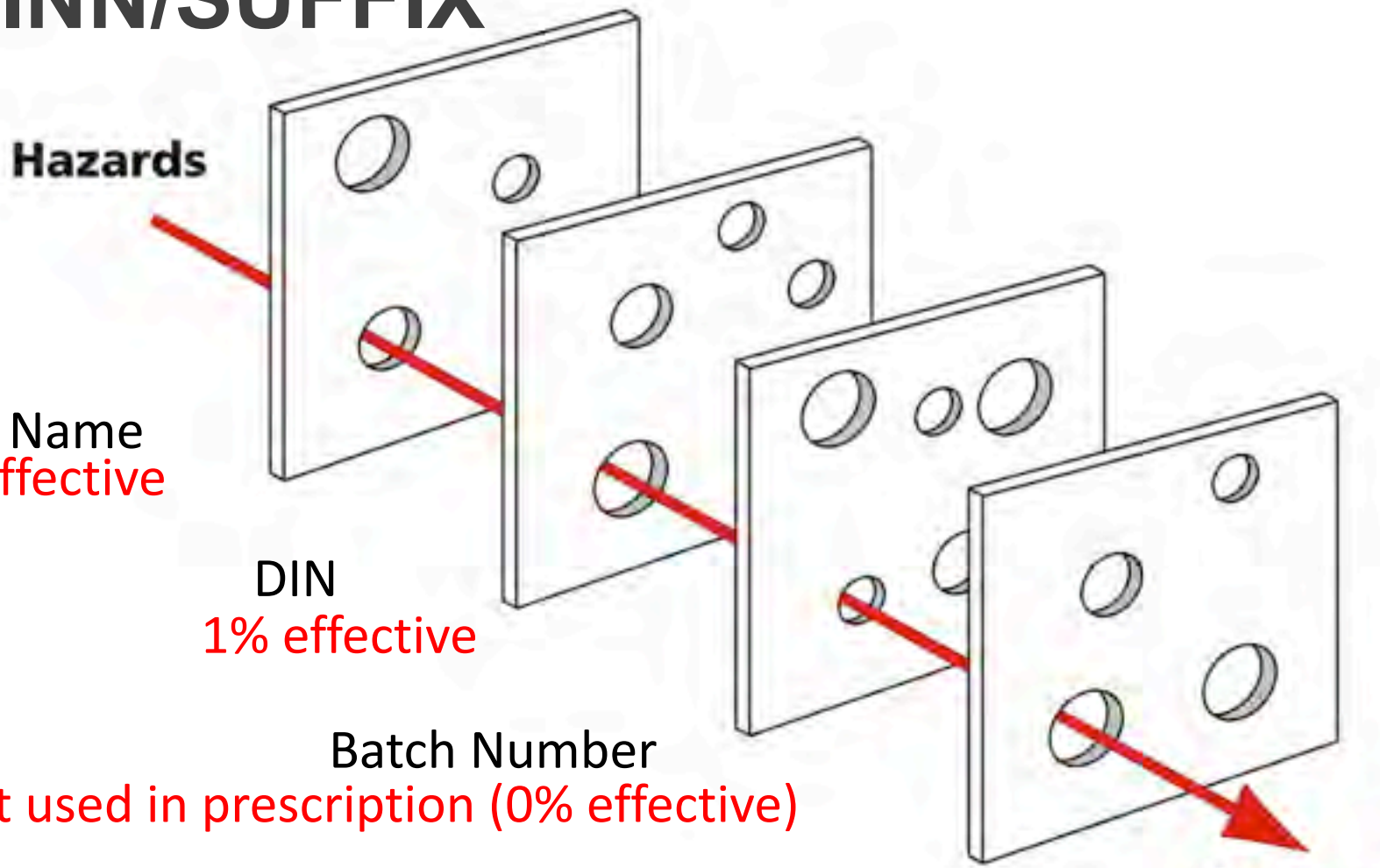
- We know that in the absence of WHO action, Health Canada and FDA *were working on creating a harmonized regional standard for North America*.

February 14, 2019: Health Canada Announces Its Naming Policy

- No distinct nonproprietary names or suffix
- No harmonization with FDA/"North American approach"
- Shared INNs covering multiple products
- Reliance on Drug Information Number (DIN) used primarily by pharmacists
- **Identifies lack of WHO Action implementing of an international standard** as a factor in the decision:

  "There is no internationally adopted naming scheme to distinguish among biologics that, based on active ingredient, will be assigned the same International Nonproprietary Name (INN) by the World Health Organization"

Effectiveness of "Defenses" in Product Identification (Patient Record)- WITHOUT DISTINCT INN/SUFFIX



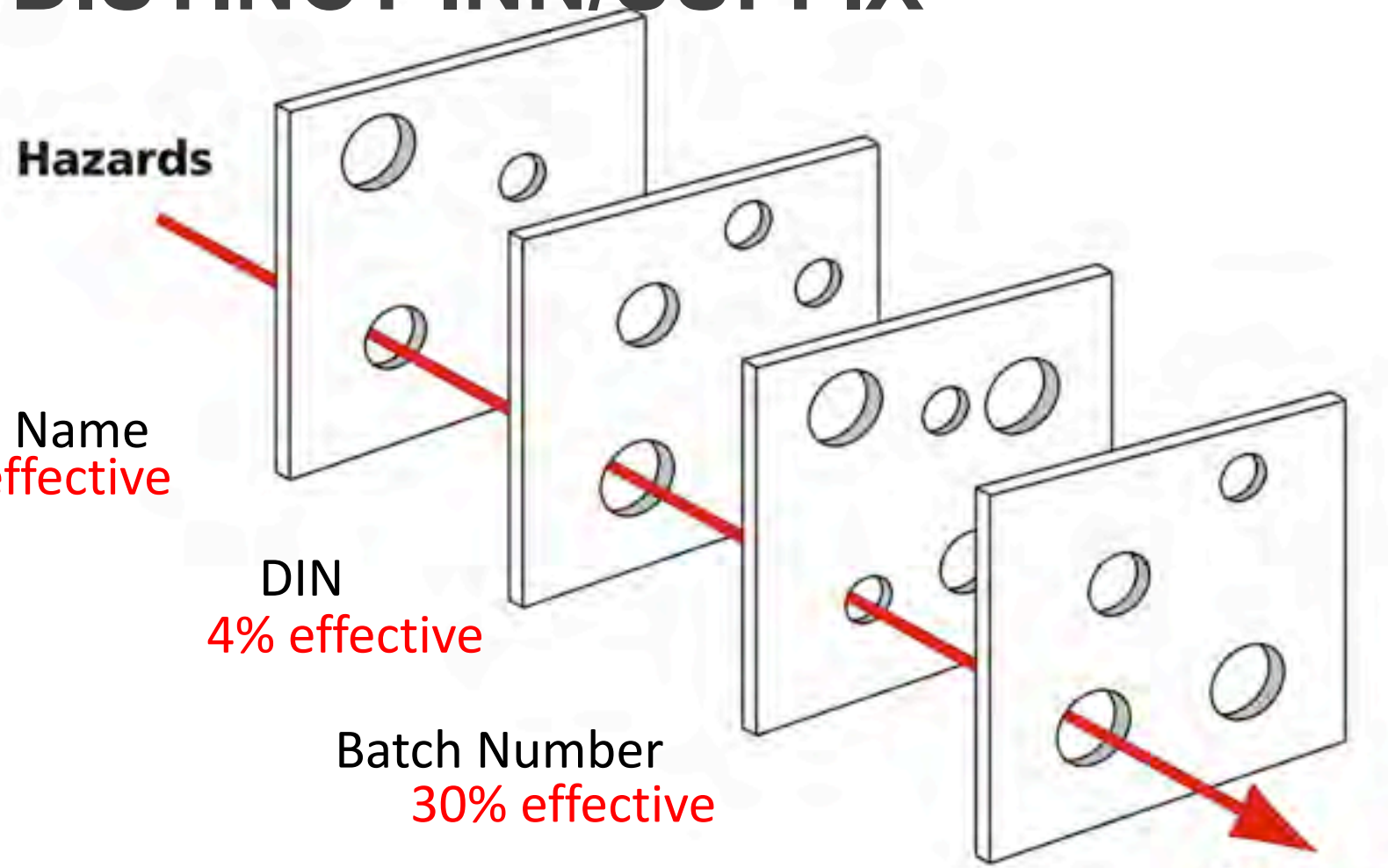
Brand Name
79% effective

DIN
1% effective

Batch Number
Not used in prescription (0% effective)

Distinct INN/Suffix
Not implemented (0% effective)

Effectiveness of "Defenses" in Product Identification (Adverse Event Reporting)- WITHOUT DISTINCT INN/SUFFIX



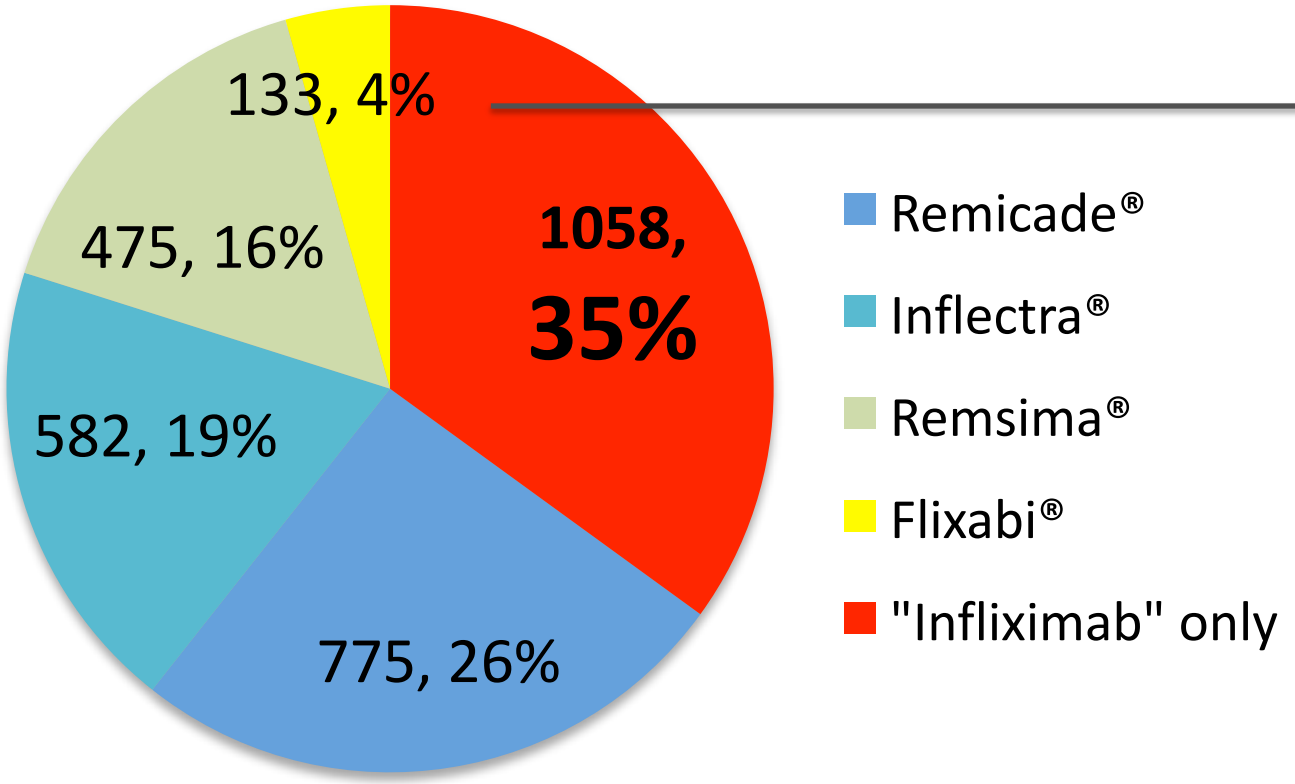
Brand Name
70% effective

DIN
4% effective

Batch Number
30% effective

Distinct INN/Suffix
Not implemented (0% effective)

Inadequacy of Reliance on Brand Name – Borne Out by Adverse Event Reporting Data in EU.



35% of EU adverse event reports for infliximab in 2018 did not specify brand name.

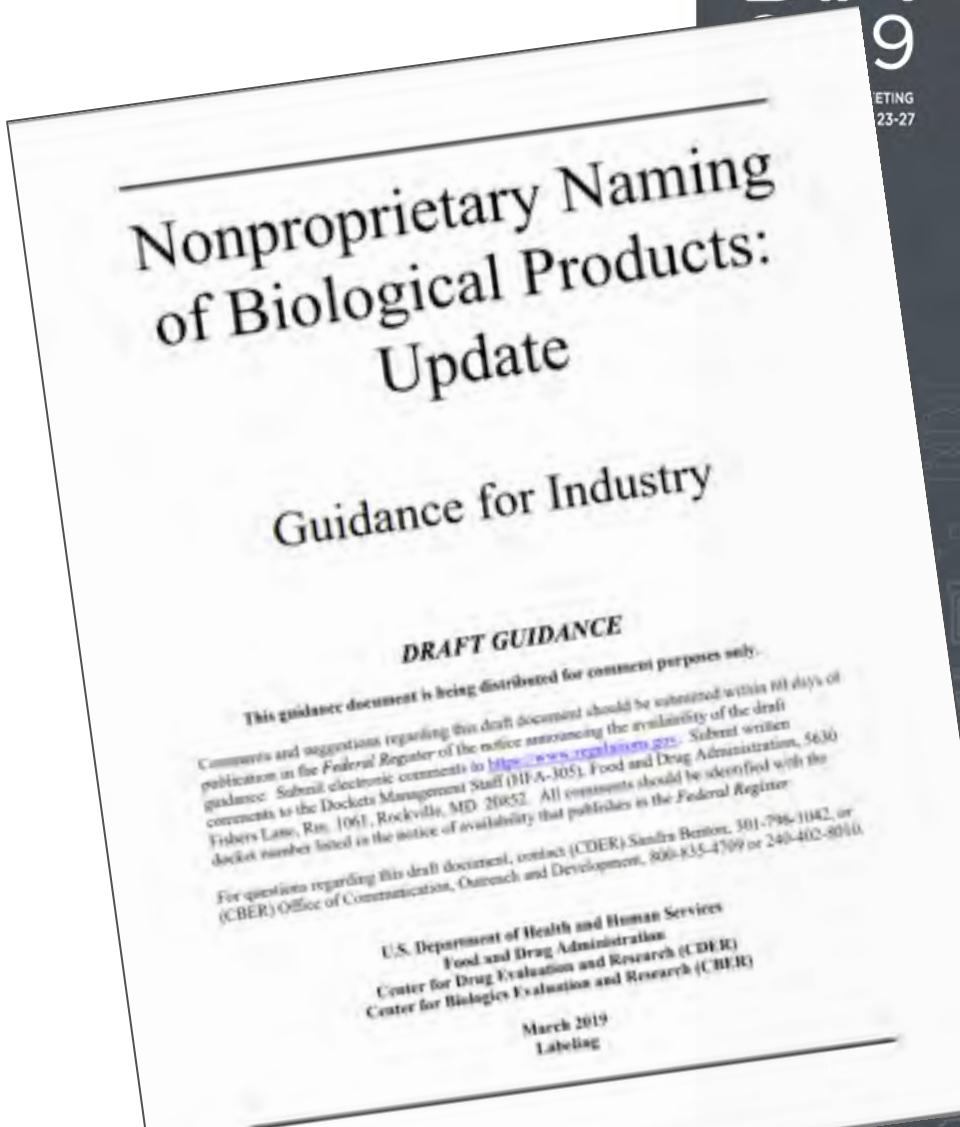
Note that this is **despite the fact** that reporting by brand name has been **required by law** since 2012.

Source: EudraVigilance- European database of suspected adverse drug reaction reports. www.adrreports.eu ; accessed May 3, 2019.

FDA Updated Naming Guidance

Shortly after the Health Canada decision, FDA announced that it was dropping the requirement to retrospectively apply suffixes to existing biologic products, including originator biologic and follow-on/biosimilar insulins. **All products- innovator and biosimilar- will receive suffixes going forward.**

Health Canada explicitly cited these costs in their "What We Heard" document as a reason they did not ultimately choose to harmonize with FDA's system.


Nonproprietary Naming of Biological Products: Update

Guidance for Industry

DRAFT GUIDANCE

This guidance document is being distributed for comment purposes only.

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
Center for Biologics Evaluation and Research (CBER)

March 2019
Labeling

Conclusions

- Lack of timely WHO leadership on the naming issue has resulted in regulators forging their own paths.
- Individual country-specific systems are not a substitute for a global pharmacovigilance system for biologics; they do not adequately address safety and tracking challenges, nor address patient and physician concerns
- In particular, adverse event reporting data from jurisdictions reliant on consistent use of brand names by practitioners shows that this approach has not proven to be an effective solution, despite having been required by EU law since 2012.

Conclusions, continued

- While some regulators explicitly support distinct naming systems (US FDA, Japan's PMDA, UAE, etc.), past supporters who have grown impatient have still expressed willingness to harmonize (Australia, Canada).
- However, the recent Health Canada and FDA decisions have underscored the urgency for, and increased the likelihood of, international harmonization and WHO leadership.

Thank You for Your Attention

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@SAFEBiologics

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