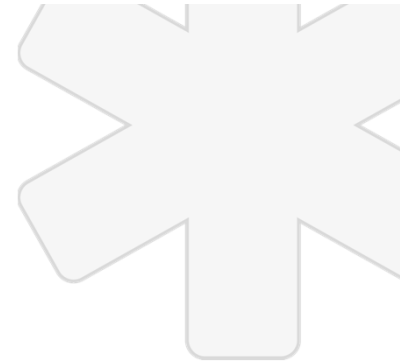




European Federation of Pharmaceutical
Industries and Associations



Annual Regulatory GMP/GDP Inspection Survey 2019 Data

Author: MQEG Inspection team

Date: 25 May 2020

Version: 1

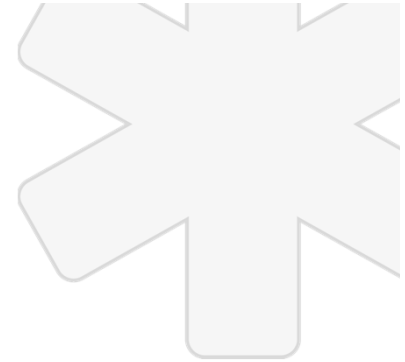


Public Summary



EFPIA'S ANNUAL INSPECTION SURVEY

Background and History



* History

- * The annual inspection survey was initiated in 2003 with the intent to gather data regarding inspections activities in the research-based industry

* Intention

- * Monitor trends and new focus areas of GMP/GDP inspections / ISO-certifications
- * Continue to promote reliance, collaboration and consistency in inspections by highlighting duplicate regulatory GMP/GDP inspections / ISO-certifications
- * Materialise the benefits of PIC/S membership in optimizing use of inspection resources with a harmonized risk-based approach for inspections while maintaining patient safety

* Scope

- * Regulatory GMP/GDP inspections & related ISO-certifications for regulatory purpose
- * Manufacturing sites and commercial affiliates
- * Inside and outside the Regulatory Authority's own borders (domestic and foreign)

EFPIA'S ANNUAL INSPECTION SURVEY

Striving for Reliance: The Same Product Manufactured Going to Patients All Over the World Independent of the GMDP -Standard

> **100** strong
Regulatory Systems

n Standards

1 Manufacturing

1 Product

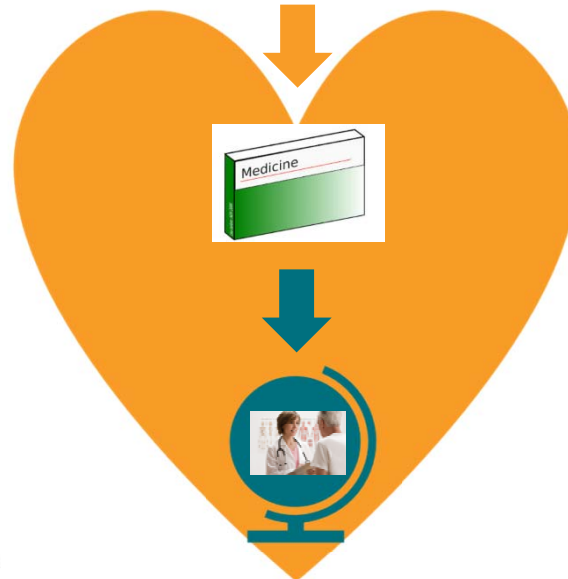
n Patient



520 Foreign Inspections in 2019

> 85 000h invested by Regulators

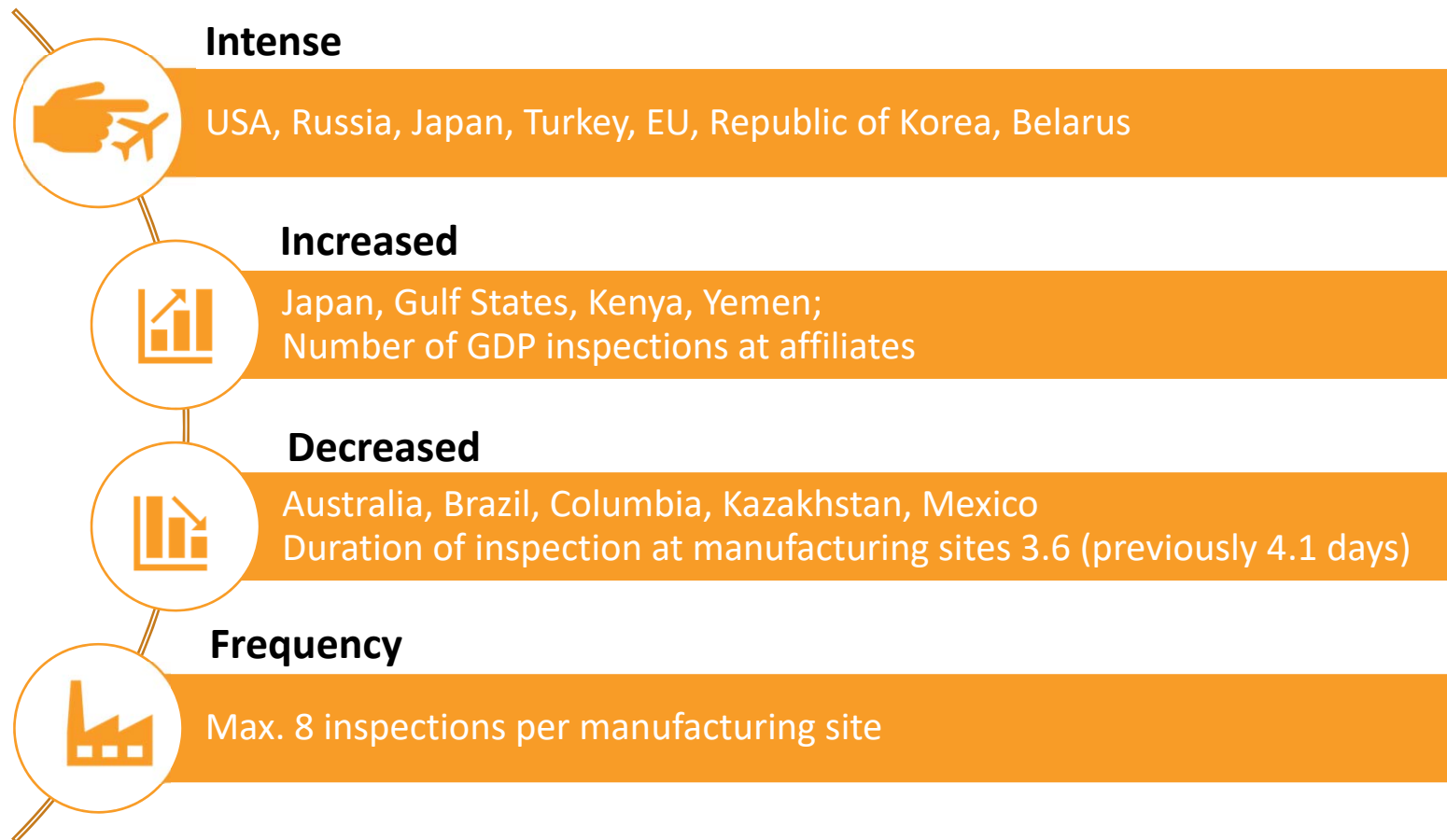
> 700 000h invested by Industry



EFPIA'S ANNUAL INSPECTION SURVEY

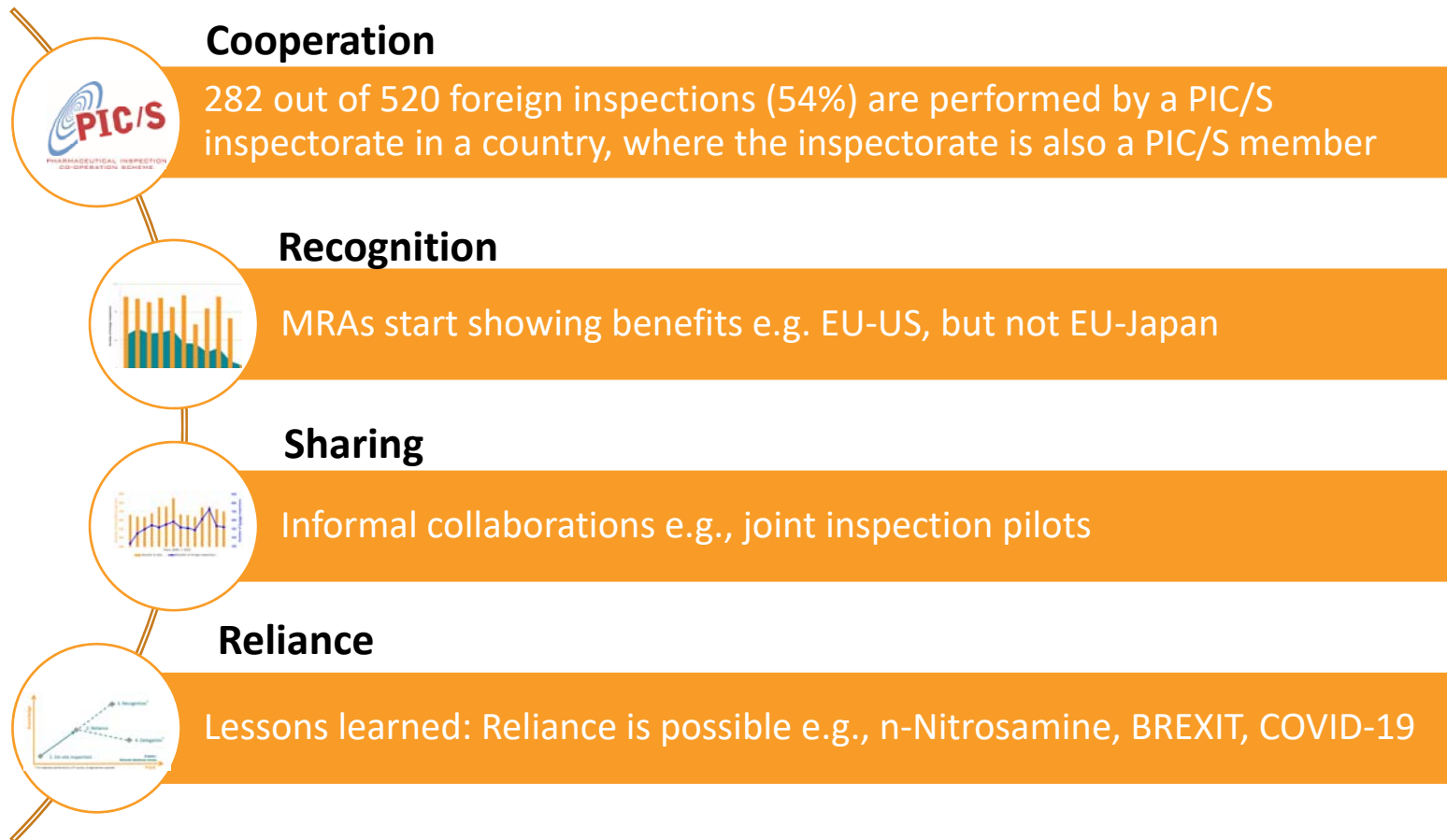
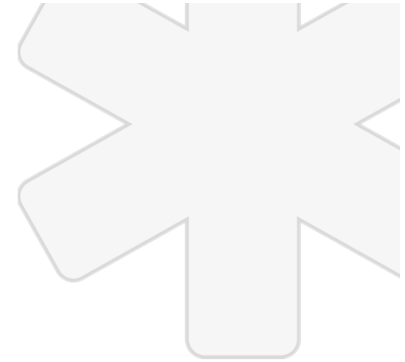
The Situation was Dynamic in 2019

Facts on Inspections



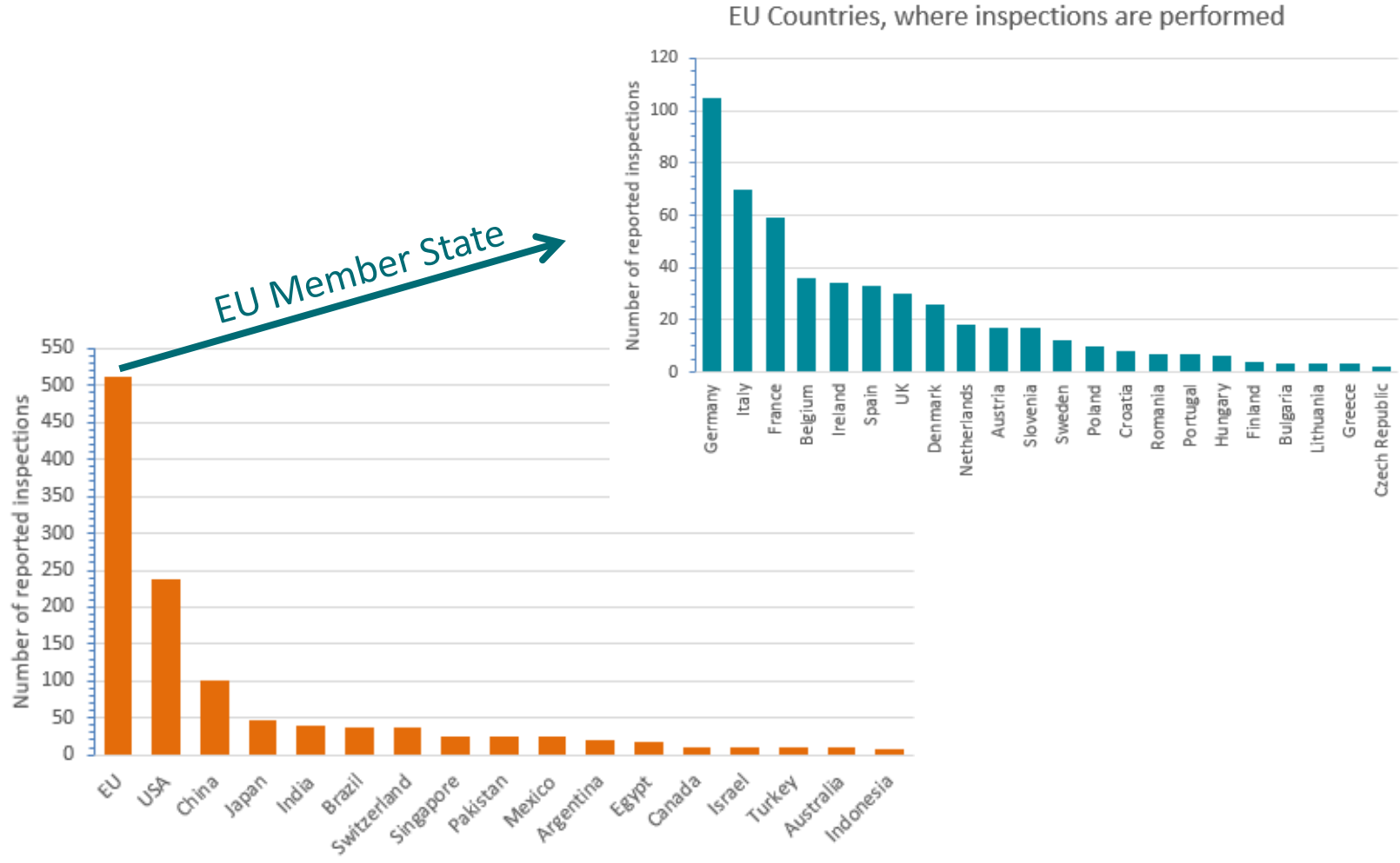
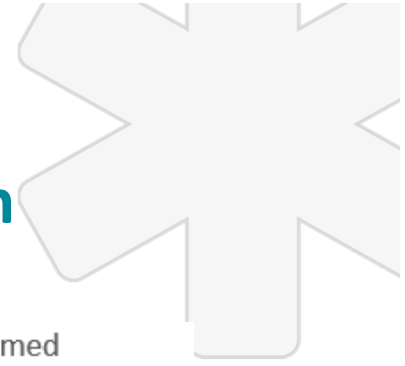
EFPIA'S ANNUAL INSPECTION SURVEY

Lessons Learned from the 2019 Data Collaboration



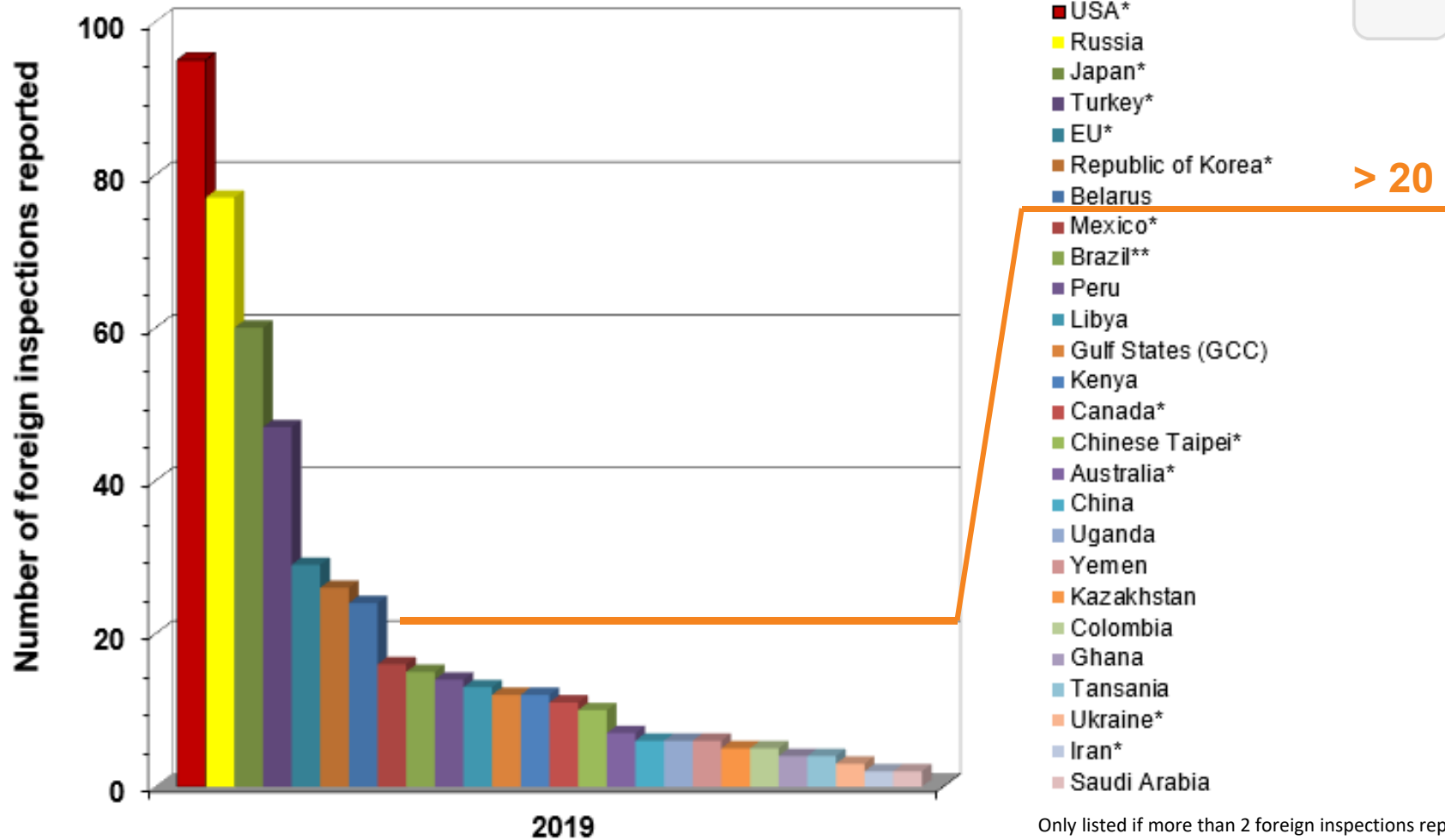
EFPIA'S ANNUAL INSPECTION SURVEY

Locations of Manufacturing Facilities Included in the Survey



EFPIA'S ANNUAL INSPECTION SURVEY

Number of Foreign Inspections at Manufacturing Sites ordered by country (>1 inspections; EU as one entity)

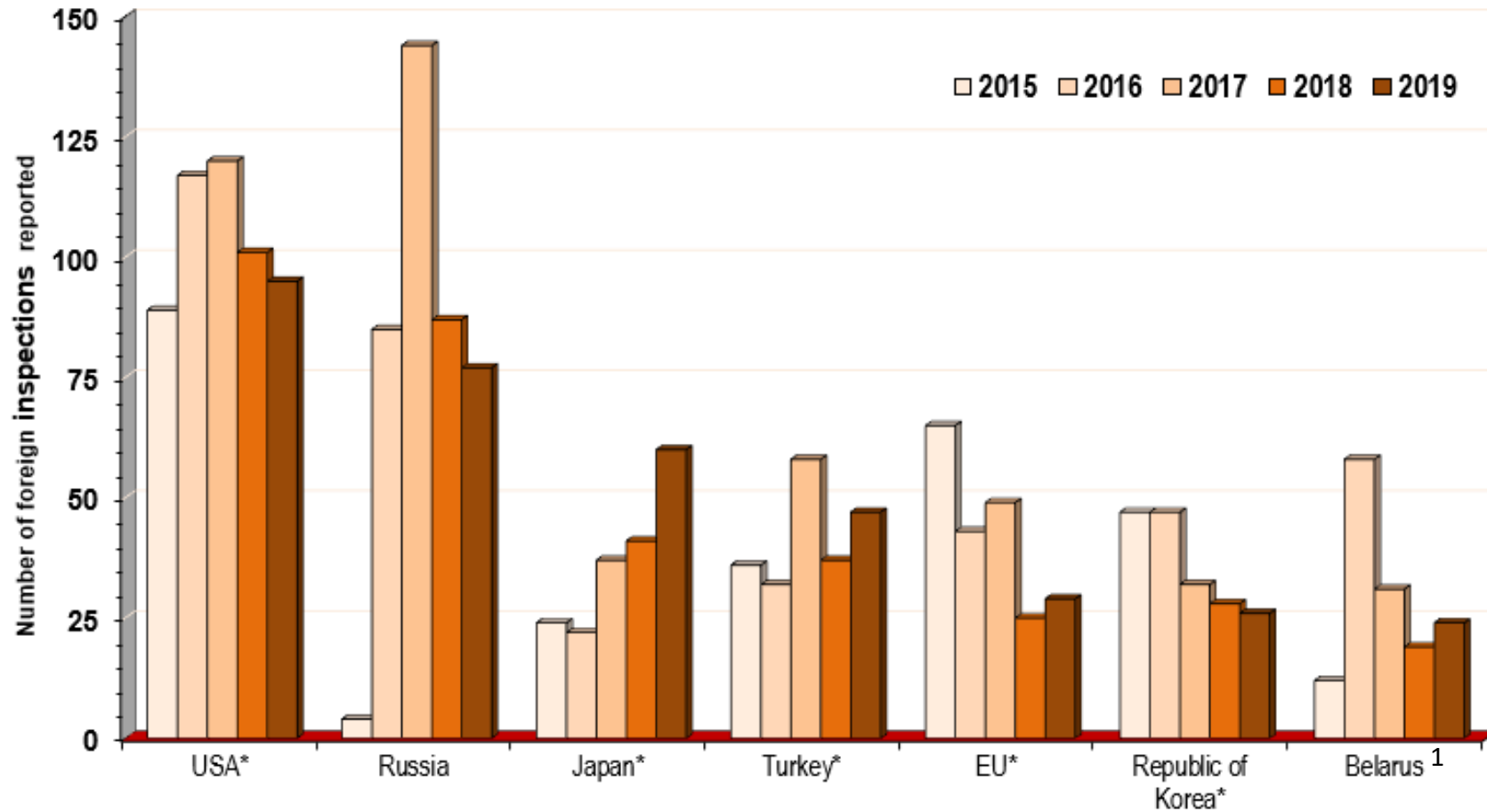


*Inspectorate is a PIC/S member **PIC/S Applicant ***PIC/S Pre-Applicant

EFPIA ANNUAL INSPECTION SURVEY - 2019 DATA

EFPIA'S ANNUAL INSPECTION SURVEY

Number of Foreign Inspections by Country

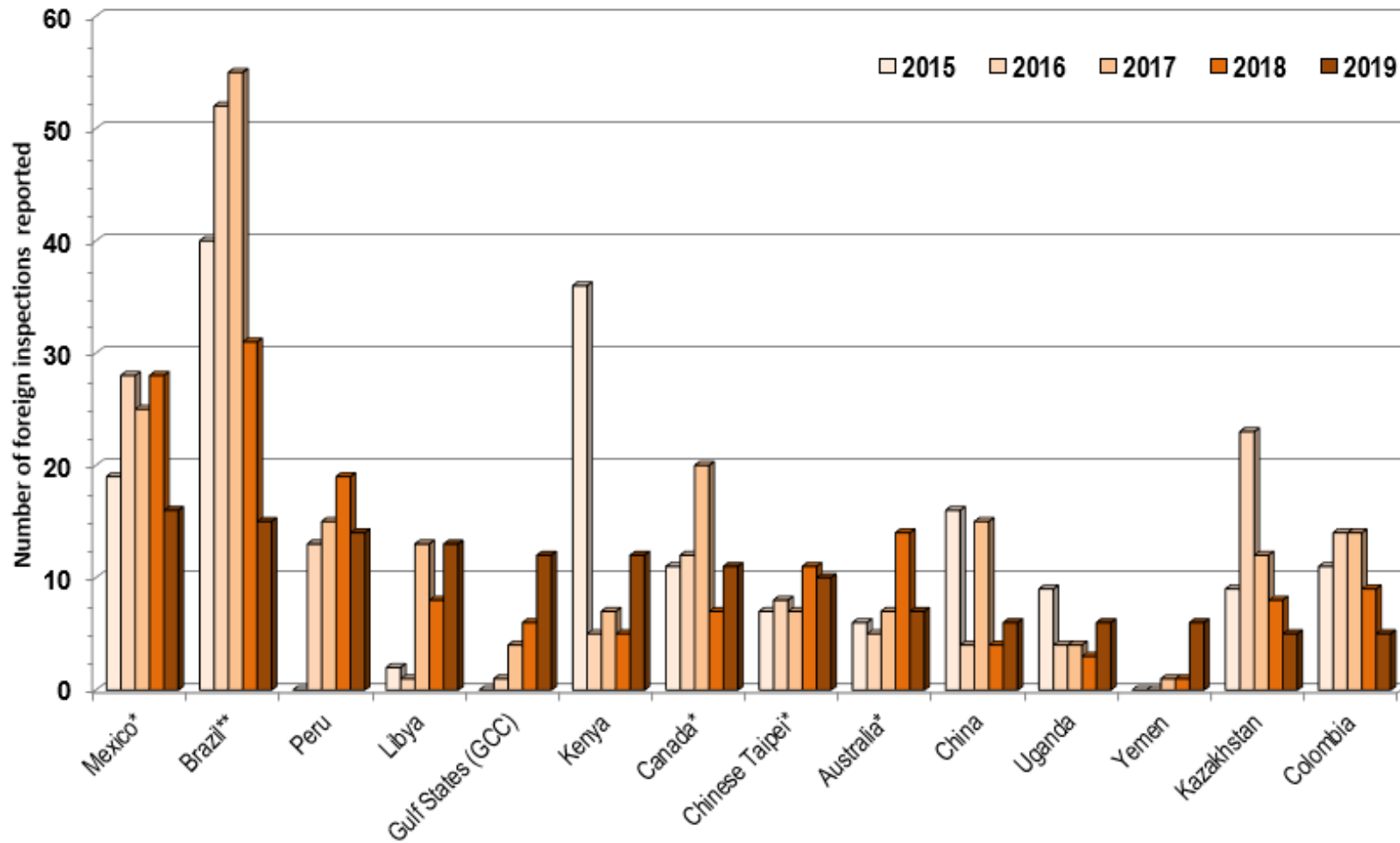


*Inspectorate is a PIC/S member **PIC/S Applicant ***PIC/S Pre-Applicant ¹issuing also EEU certificates (4)

EFPIA ANNUAL INSPECTION SURVEY - 2019 DATA

EFPIA'S ANNUAL INSPECTION SURVEY

Number of Foreign Inspections by Country



*Inspectorate is a PIC/S member **PIC/S Applicant ***PIC/S Pre-Applicant

EFPIA ANNUAL INSPECTION SURVEY - 2019 DATA

EFPIA'S ANNUAL INSPECTION SURVEY

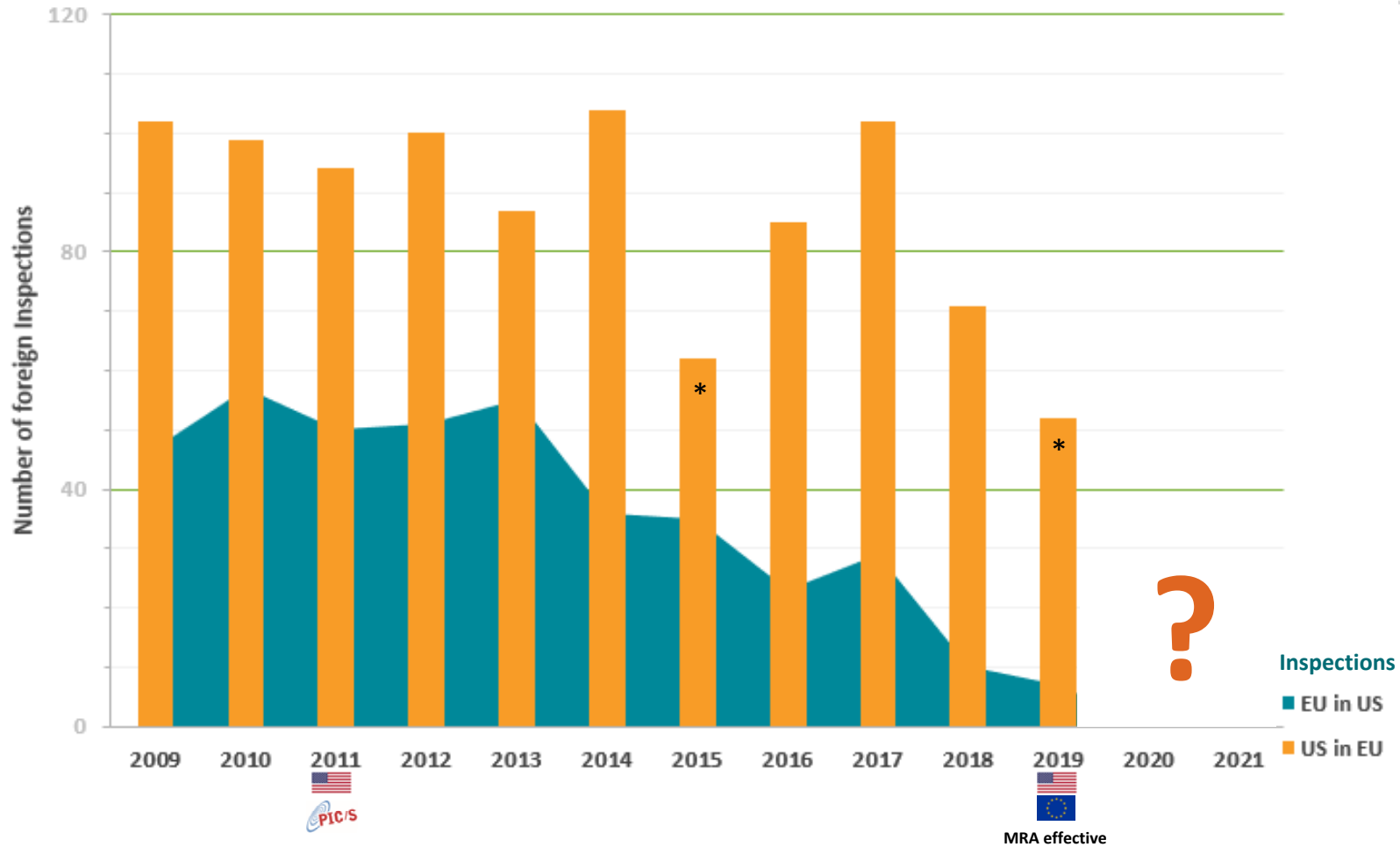
Examples of Inspection at one Manufacturing Site of Different Companies

Site in country	Domestic inspections	Foreign inspections	Sum	Foreign inspectorates
Germany	1	7	8	Russia (2), US (2), Iran, Libya, Canada
Italy	1	6	7	Belarus, Russia, Kazakhstan, Belarus (for EEU), Turkey, China
US	1	6	7	Japan (2), Canada, South Korea (3)
US	1	6	7	Brazil, Chinese Taipei, South Korea, Japan (3p)
Ireland	0	6	6	Kazakhstan, Libya, Japan (2p), GCC, Belarus
Netherlands	2	4	6	Libya, US (2), Russia
Germany	1	4	5	GCC, Yemen, Ivory Coast, Ukraine
US	5	3	8	EMA, Canada, Australia
Belgium	5	3	8	US(2), Kenya

Top 5 and more inspections at one site if reported by the companies

EFPIA'S ANNUAL INSPECTION SURVEY - MRA US/EU

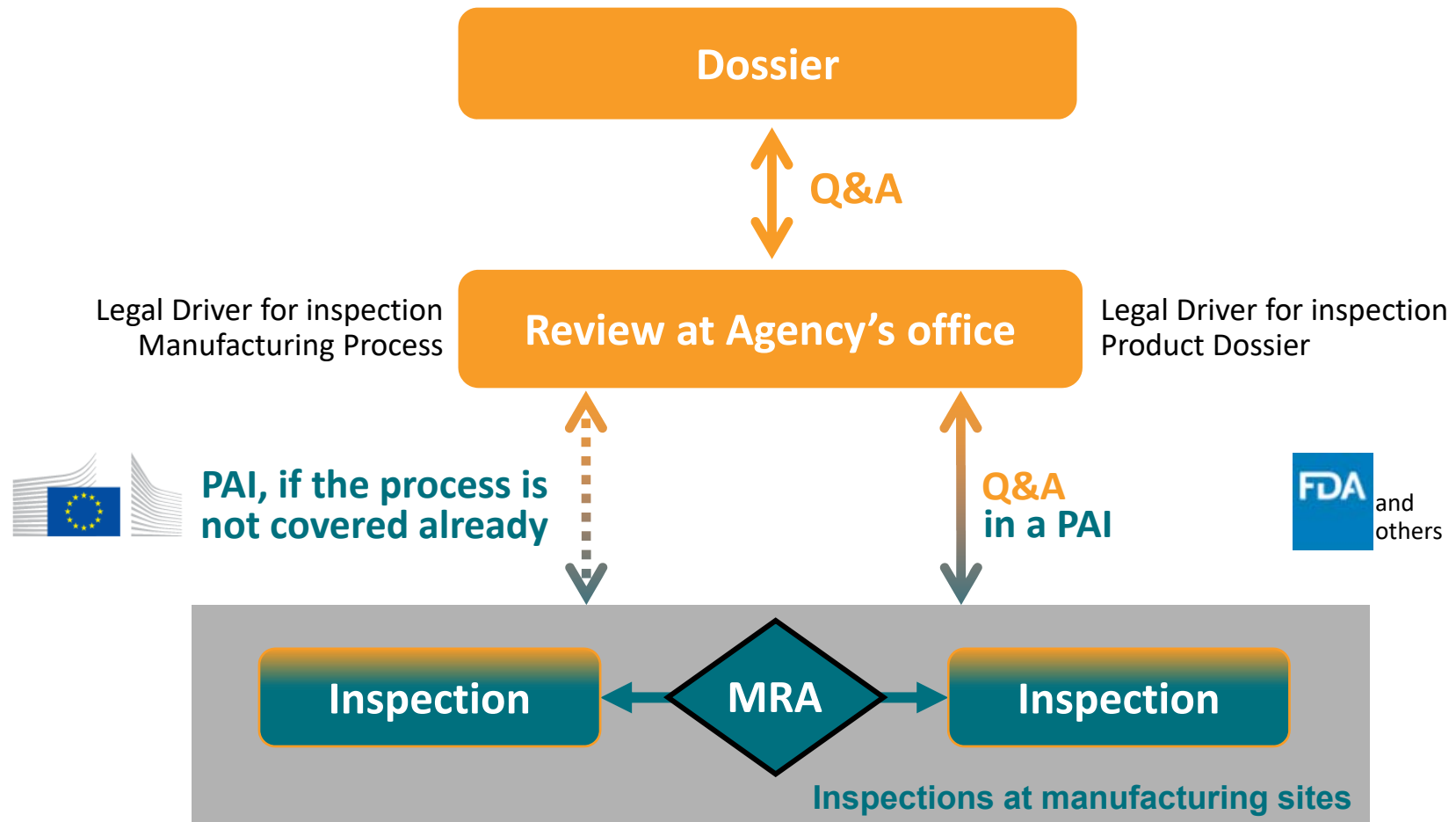
Opportunities: Efficient MRA Implementation can Drive Further Reduction of Inspections



*Government shut down in US >20 days

EFPIA'S ANNUAL INSPECTION SURVEY - PAI

Pre-Approval Inspections (PAIs) can be Focused on Dossier Review and Relying on Previous Inspections



EU-US MRA

Situation on Pre-Approval Inspections



- * **Legal situation**

- * The MRA allows recognition of inspections prior approval

- * **Results of the Data Assessment**

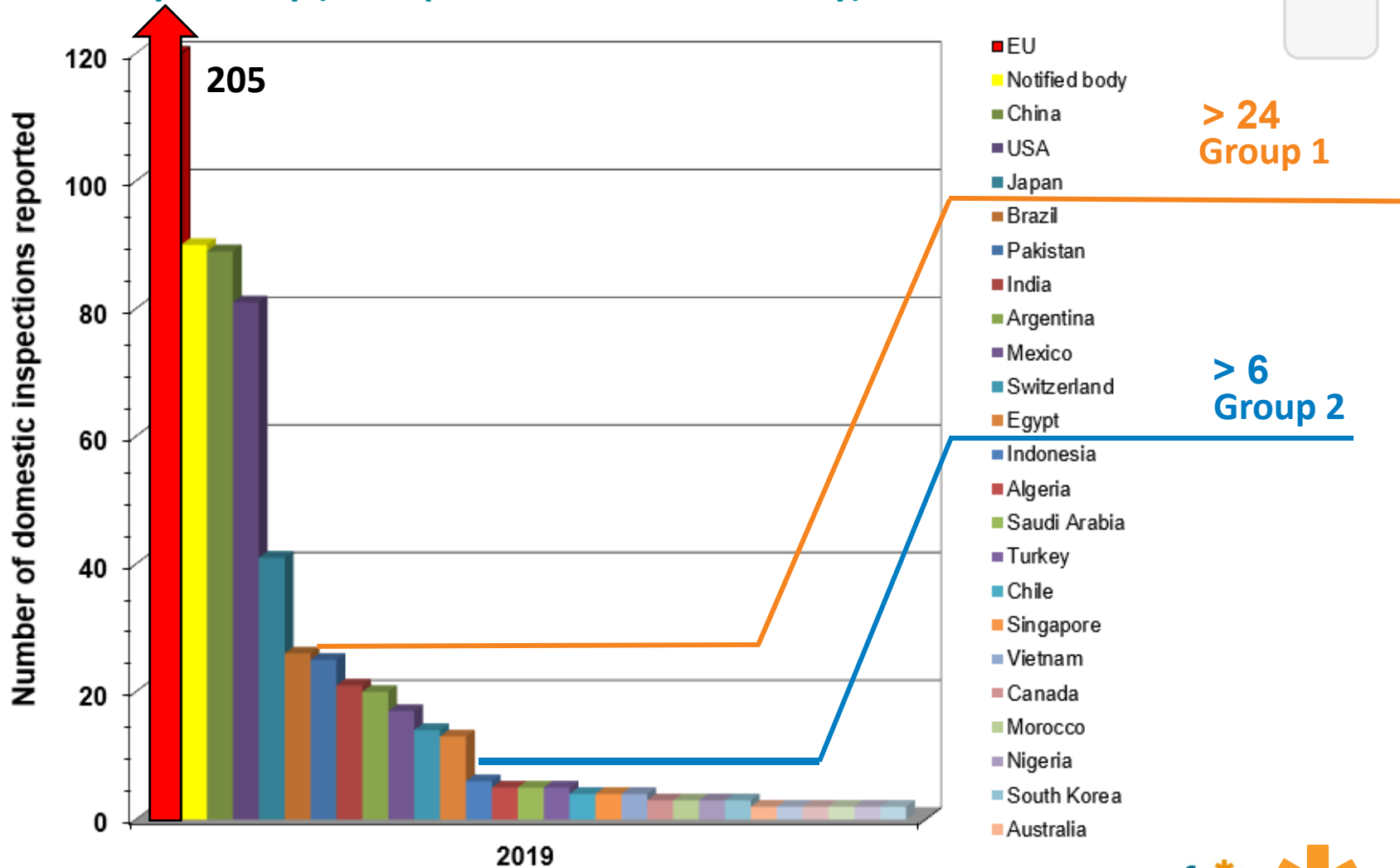
- * There is no evidence that EU inspections are generally recognized under the Pre-approval inspection paradigm of US-FDA

- * **Opportunities for focused PAIs**

- * The duration of a PAI could be reduced to e.g., 1 day focusing on the clarification of the content of the dossier by referencing the results from routine GMP inspections

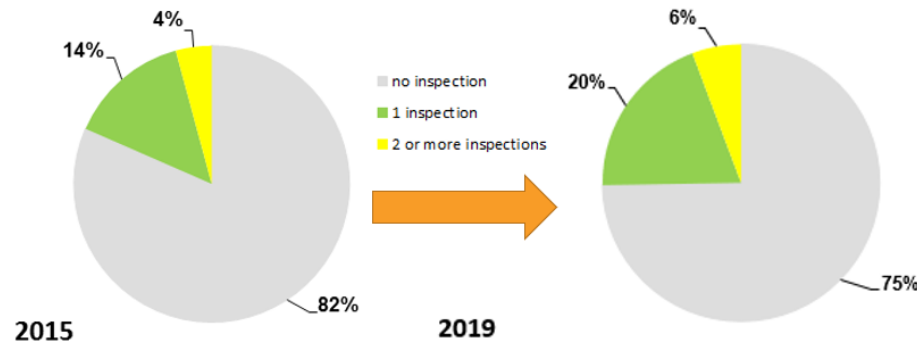
ANNUAL INSPECTION SURVEY

Number of Domestic Inspections Reported ordered by country (>1 inspections; EU as one entity)

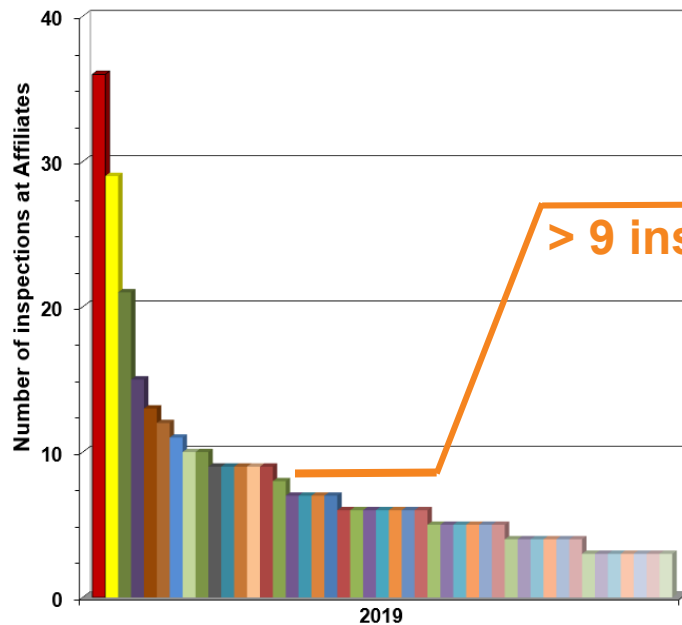


EFPIA'S ANNUAL INSPECTION SURVEY - GDP

The Numbers of Reported Good Distribution Practice (GDP) Inspection at Local Affiliates Have Increased



More GDP inspections
No trend by region



> 9 inspections

- Ecuador / ARCSA
 - Czech Republic / SUKL
 - Japan / PMDA
 - Chile / ISP
 - Denmark / DKMA
 - Poland / CPI
 - South Africa / SAHPRA
 - Belgium / AFMPS
 - Canada / HPFBI
 - Peru / DIGEMID
 - Philippines / FDA
 - Bulgaria / BDA
 - Hungary / OGYEI
 - Argentina / ANMAT
 - Indonesia / NADFC
 - Colombia / INVIMA
 - Slovakia / SIDC
 - Honduras / ARSA
 - Latvia / SAM
 - Hong Kong China / MoH
 - Algeria / LNCPP
 - UK / MHRA
 - Spain / AEMPS
 - Notified Body
 - Netherlands / IGJ
 - China / NMPA
 - Germany / RP
 - Romania / NMA
 - Brazil / ANVISA
 - Switzerland / Swissmedic
 - France / ANSM
 - Malaysia / NPCB
 - Saudi Arabia / SFDA
 - South Korea / MFDS
 - Austria / AGES
 - USA / FDA
 - Ireland / HPR
 - Portugal / INFARMED
 - Singapore / HSA
 - Sweden / MPA
 - Ukraine / MoH
 - Lithuania / SMCA
 - Finland / FIMEA
 - Greece / NOM
 - Costa Rica / MoH
- Only listed if more than 2 inspections

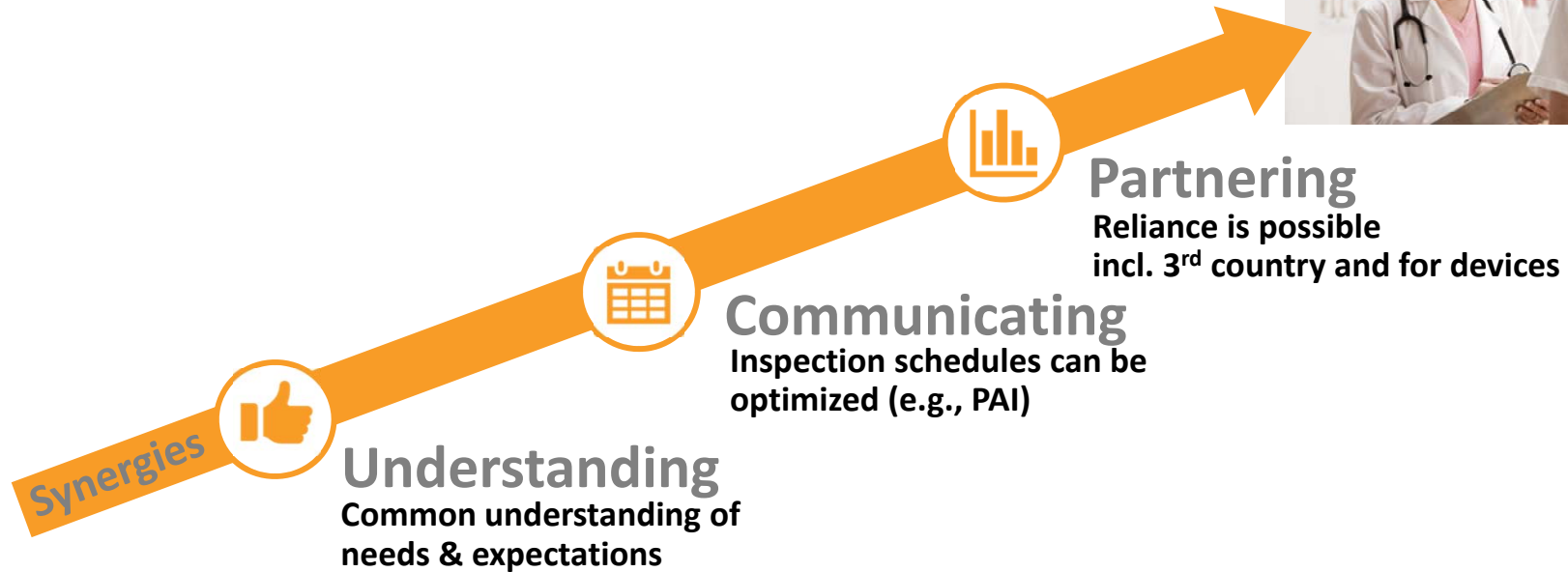


EFPIA'S ANNUAL INSPECTION SURVEY 2019

Resources Can be Saved for Better Use

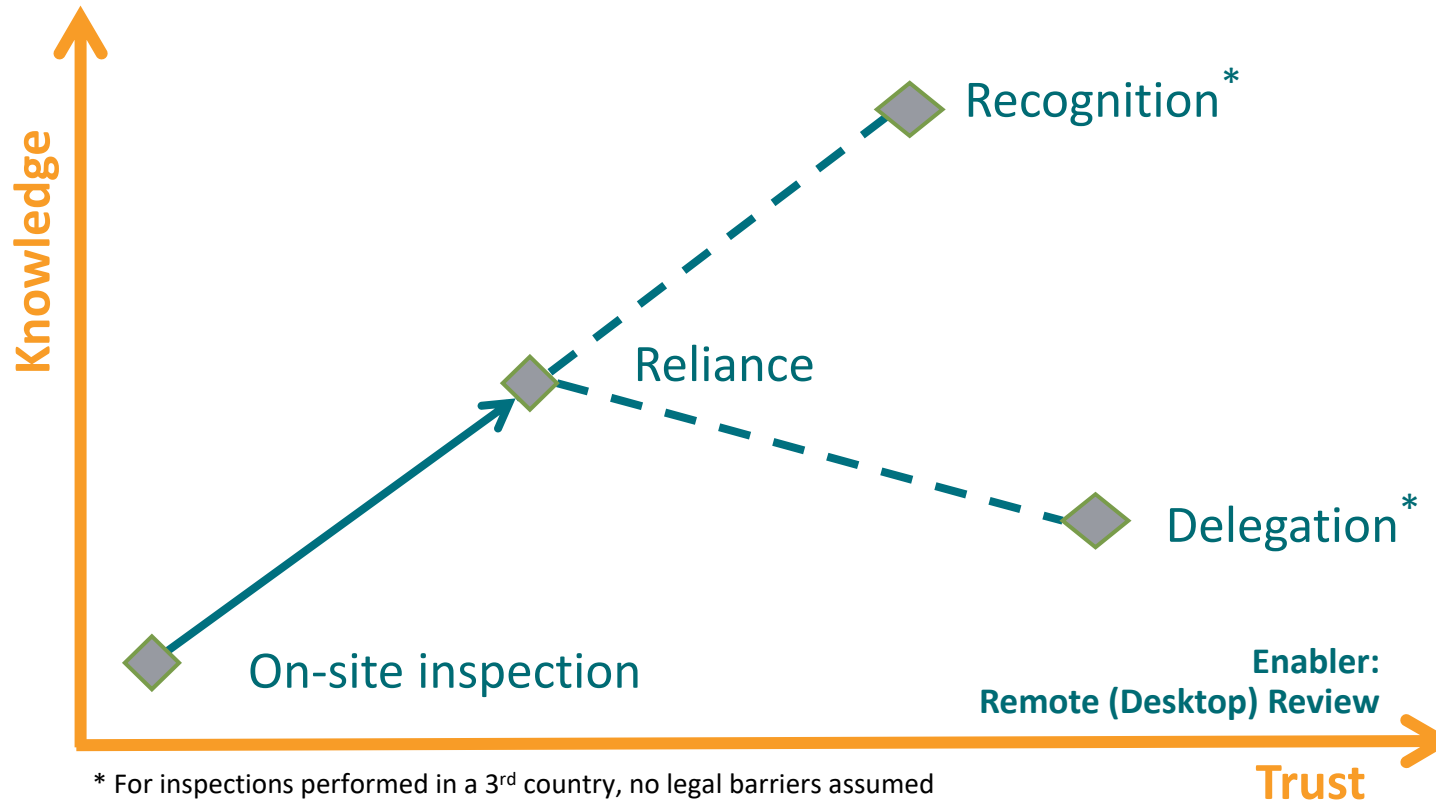


Protecting



EFPIA'S ANNUAL INSPECTION SURVEY

An Approach Towards the Ideal State



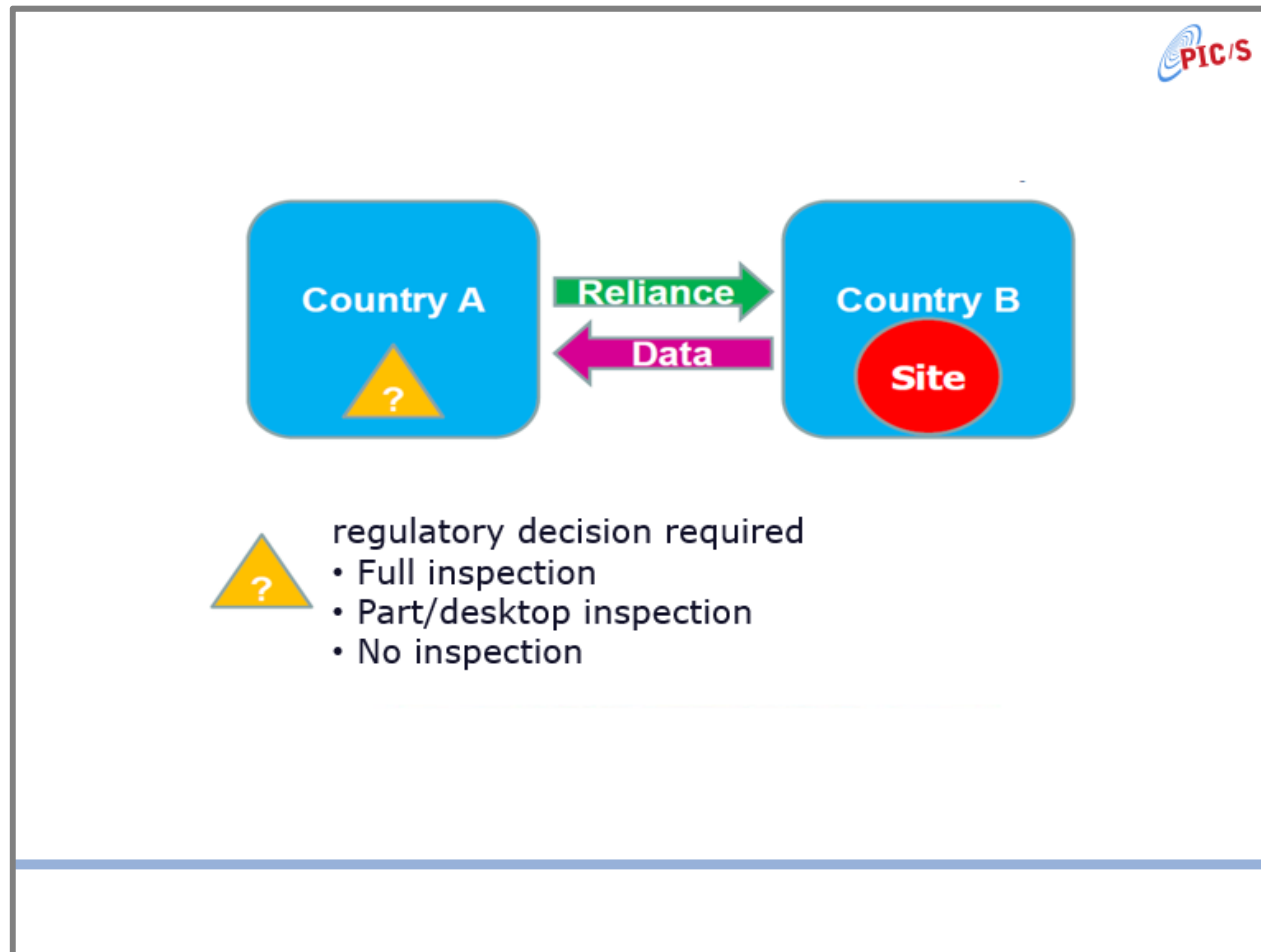
- Risk-based inspection planning, PIC/S guideline PI 037-1, 1 January 2012
- GMP-Inspection reliance, PIC/S guideline PI 048-1, 1 June 2018
- Classification of GMP Deficiencies, PIC/S guideline PI 040-1, 1 January 2019



Convergence of Good Manufacturing Practice (GMP) standards and Related Inspections, IFPMA Position paper, January 2020.

GMP-INSPECTION RELIANCE

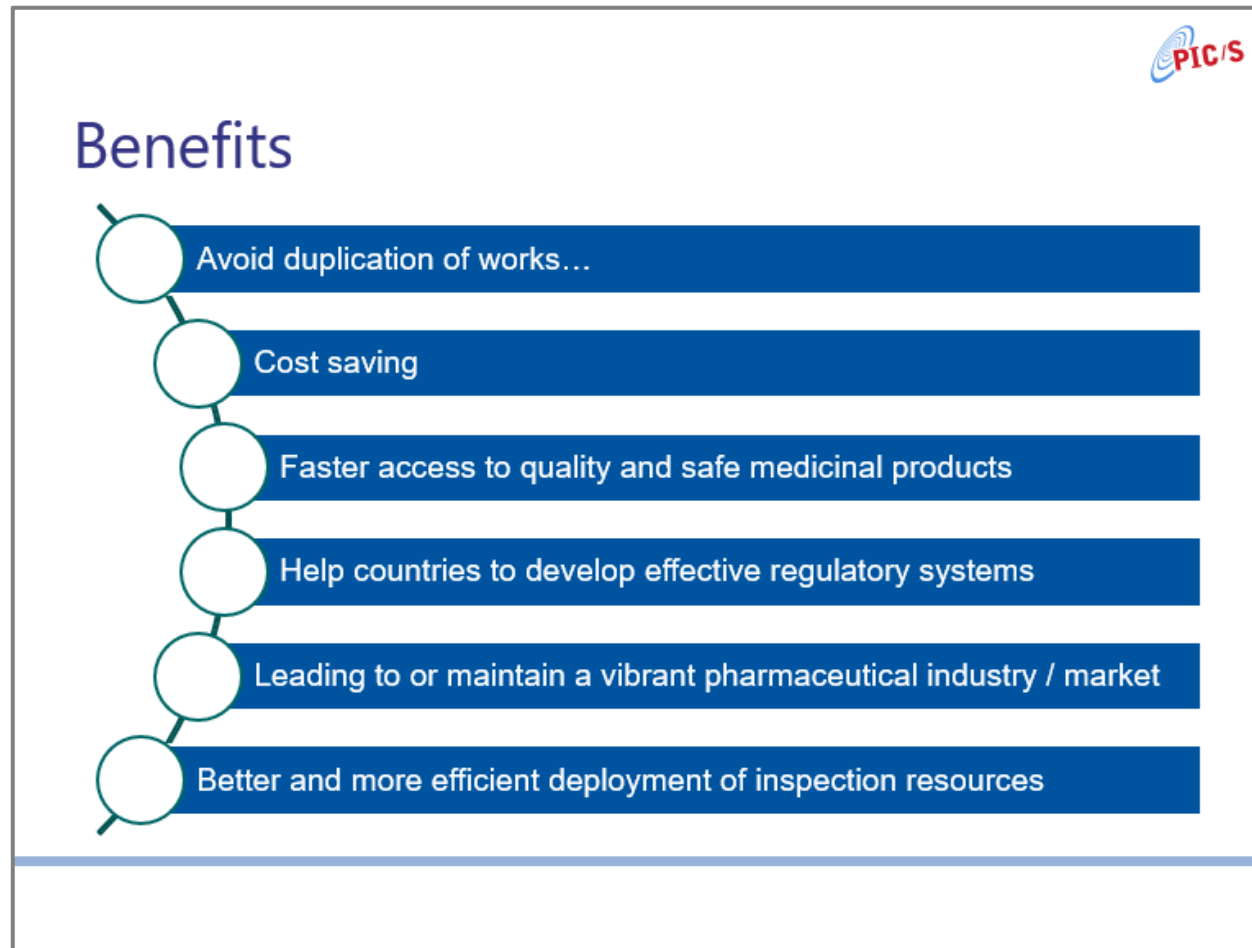
PIC/S Promotes Reliance by Exchanging Data and Facilitate Different Options for Regulatory Decision



Credit to the PIC/S secretariat for using the slide, 23. April 2020

GMP-INSPECTION RELIANCE

PIC/S Highlights Benefits Inspectorates can Achieve Implementing Reliance



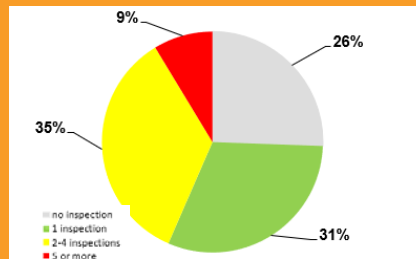
Credit to the PIC/S secretariat for using the slide, 23. April 2020

EFPIA'S ANNUAL INSPECTION SURVEY

The 2019 Data Demonstrates Reliance can Replace Redundant Inspections



Redundant inspections at one site




Health authorities are more efficient locally

GMP-Inspection Reliance Should Follow Principles and Guidance Provided in 'GMP Inspection Reliance'
 Inspections by a local inspectorate can be more efficient and mature than an inspection by a 3rd country.

Prerequisite	Advantage	Transparency
<ul style="list-style-type: none"> High quality standards embraced and supported by the local government Evaluation of national regulatory systems by an independent control / maturity metrics e.g., PIC/S, member inspectorates, WHO Global Benchmarking Tool 	<ul style="list-style-type: none"> The local inspectorate has flexibility regarding coming back and following up on issues Knowledge on the site specific history Insight on culture i.e., do/don'ts in the local area Optimisation of resources Benefits from improved inspection logistics e.g., no language barrier, less travel / environmental friendly 	<ul style="list-style-type: none"> A non-compliant local site put the integrity of the local inspectorate at risk Direct access for feedback on CAPAs Inspectorate may not like to see their local manufacturing sites in the headlines

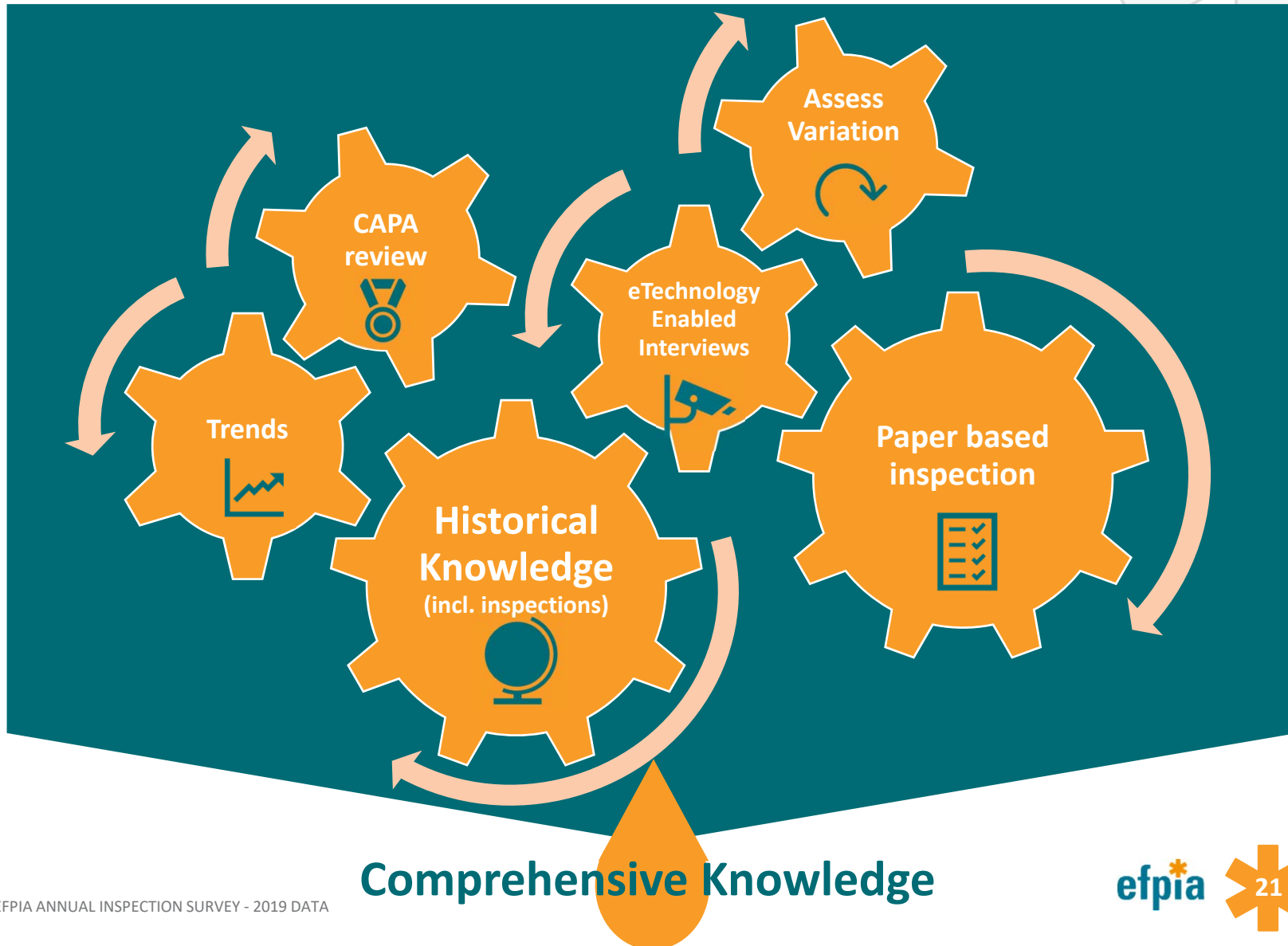
Remote Desktop Review* can be an alternative



 *GMP-Inspection reliance, PIC/S guideline PI 048-1, 1 June 2018


REMOTE DESKTOP REVIEW

Comprehensive Knowledge can be Gained from Available Information




STEP 1: INSPECTION PLANNING


A Simple and Qualitative Quality Risk Management Tool for Inspection Planning is Available by PIC/S



Elements


- Knowledge of the GMP compliance status of the site
- Footprint of critical and major deficiencies
- Type of inspection i.e., routine, for cause, pre-approval






Hazards to consider


- Intrinsic risk**
 - Complexity of site, Processes and Products, Criticality to availability
- Compliance-related risk**
 - GMP/GDP / CMC, regulatory status (incl. e.g., number of deficiencies)





Output

- Risk ranking ('Quality metrics')
- Inspection frequency
- Required number of inspectors and competence / expertise
- Scope, focus, depth & duration of the next routine inspection



Fulfill the Legal Requirement for 'Inspection'

Appendix 1: The Worksheet used by this Quality Risk Management Tool

PART A – Preliminary Information about the Site

Site Name: _____
 Site Address: _____
 License Number (if any): _____
 IOP or AIT (Manufacturing): _____
 Last Inspection Date: _____
 Name of pre-work lead inspector: _____

PART B – The Intrinsic Risk Associated with the Site

Risk Factor	Risk Score	Matrix for Estimating the Intrinsic Risk								
The complexity of the site, its processes and products, is regarded as:	1 2 3 Circle one	<table border="1"> <tr> <th>Complexity</th> <th>Criticality</th> </tr> <tr> <td>1</td> <td>1</td> </tr> <tr> <td>2</td> <td>2</td> </tr> <tr> <td>3</td> <td>3</td> </tr> </table>	Complexity	Criticality	1	1	2	2	3	3
Complexity	Criticality									
1	1									
2	2									
3	3									
The criticality of the products manufactured by the site, or the criticality of the analytical testing or other service offered provided by the site, is regarded as:	1 2 3 Circle one	Use the above matrix and record the Intrinsic Risk associated with the site below: Low <input type="checkbox"/> Medium <input type="checkbox"/> High <input type="checkbox"/>								

PART C – The Compliance-related Risk based on the last inspection

The compliance risk indicated by the most recent deficiency profile of the site is:

Low <input type="checkbox"/>	No Major or Critical Deficiencies
Medium <input type="checkbox"/>	1 to 5 Major Deficiencies, Number of Major Deficiencies 1 to 5
High <input type="checkbox"/>	1 or more Critical Deficiencies or more than 5 Major Deficiencies (Note: Customise as appropriate)

PART D – The Risk Rating assigned to the Site

Complete the matrix below by combining the Intrinsic risk score and the Compliance-related risk score to determine the Risk Rating for the site.

Compliance Risk	Intrinsic Risk	Risk Rating
Low	Low	A
Low	Medium	B
Low	High	C
Medium	Low	A
Medium	Medium	B
Medium	High	C
High	Low	A
High	Medium	B
High	High	C

The Risk Rating associated with this site is: A B C

PART E – The Recommended Frequency for Routine Inspections at the Site

Using the Risk Rating, the recommended frequency for routine inspections at the site is an inspection every: _____ Years or _____ Months

PART F – Recommended Scope of the next Routine Inspection

Note: The Part should be periodically updated if new information is received about the site before the next routine inspection that may warrant a change in the scope of that inspection.

For example, information can be received relating to: Quality Defects, Recall, Market Surveillance Test Results, Enforcement Investigations, and other indicators of non-compliance such as the failure to implement a variation to an MAA. You might require the scope of the next inspection to be changed. Information may also relate to major changes at the site (indicated perhaps via an MA variation or a manufacturing authorization variation submission) and this may warrant a change in scope.

Document on the right the recommended focus & depth of the next routine inspection.

Note: Take into account the following:

- The areas in which deficiencies were identified during the most recent inspection at the site, particularly major and critical deficiencies.
- The areas that were not inspected (or that were not inspected in detail) during the most recent inspection at the site.
- The areas that were considered inadequately resourced at last inspection.
- Planned changes at the site that may alter the complexity or critically risk ratings associated with the site.
- Any other areas that the inspector feels warrants review at the next inspection.

Document on the right the required duration of the next routine inspection.

Document on the right the required number of inspectors that should be assigned to the next routine inspection.

Document on the right the required competence or expertise that will be required on the inspection team when performing the next routine inspection of the site.

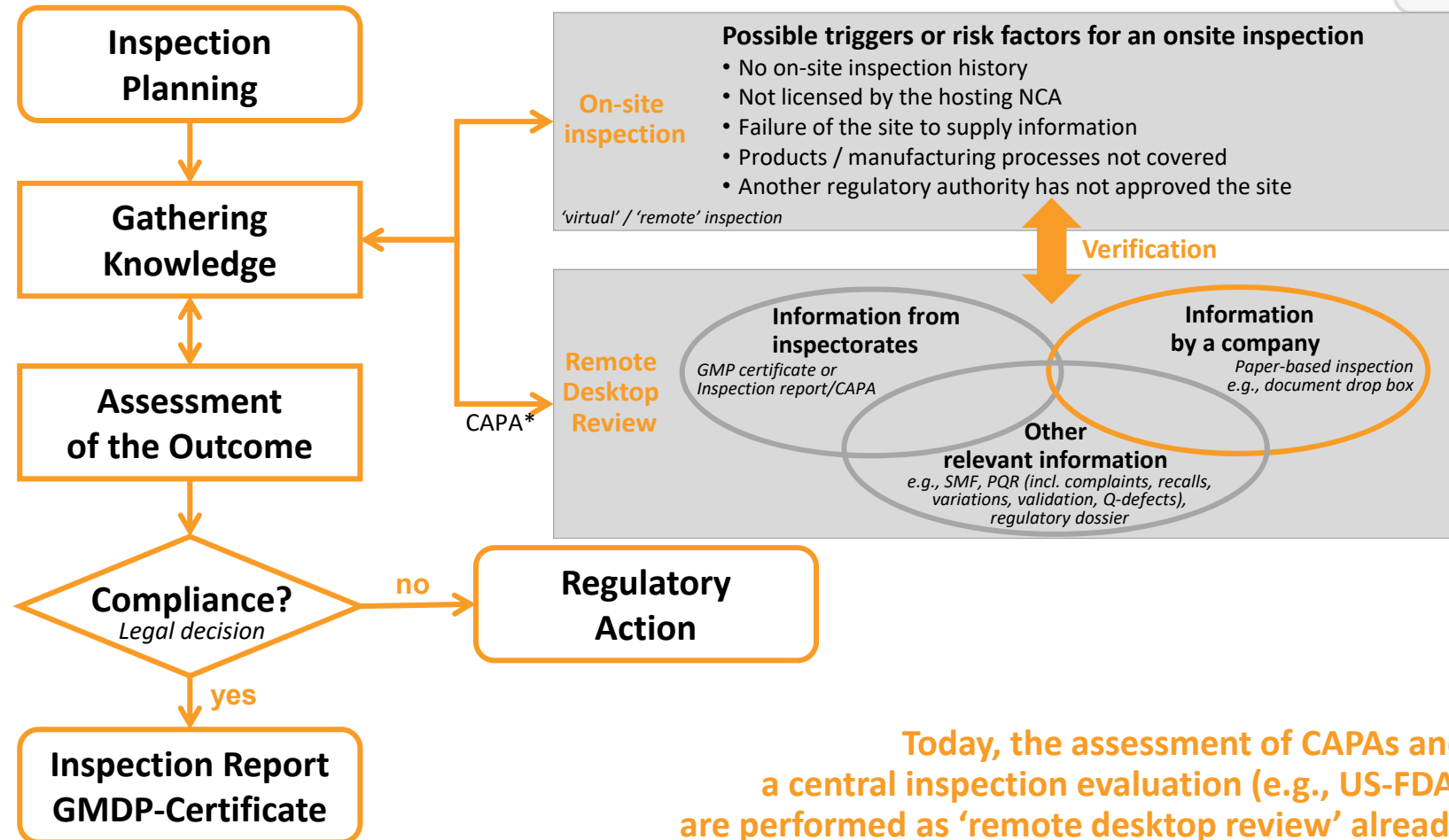
PART G – Signatures & Dates

Record here the names of the persons who completed this quality risk management exercise, and sign and date this form.

Name: _____ Name: _____
 Name: _____ Name: _____
 Signed: _____ Date: _____

OPTIONS FOR 'INSPECTIONS'

Processes Agencies Have Implemented to Fulfil the Legal Requirement for 'Inspection'

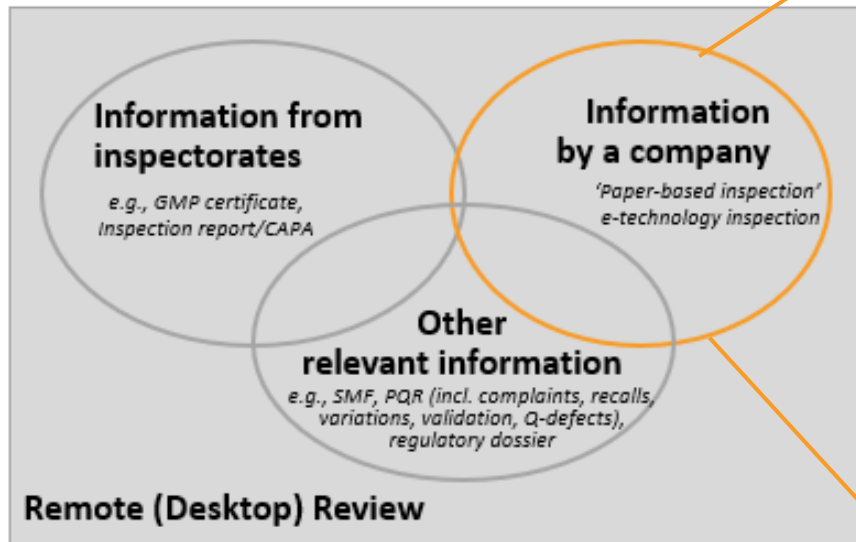


Today, the assessment of CAPAs and a central inspection evaluation (e.g., US-FDA) are performed as 'remote desktop review' already

* i.e., assessments of the responses to inspection observations e.g., from on-site inspections

PAPER - BASED INSPECTIONS IN 2019

Paper Based Inspections as Part of Remote Desktop Review in 2019 Setting the Stage for the Future



 **PIC/S** GMP-Inspection reliance, PIC/S guideline PI 048-1, 1 June 2018

Inspectorate / country where paper based inspection are conducted	Numbers reported
Japan / PMDA	53
USA	21
Japan	9
Denmark	5
Spain	5
Belgium	4
France	4
Ireland	2
Germany	1
Singapore	1
UK	1
South Korea / MFDS	6
USA	5
Italy	1
Chinese Taipei / TFDA	3
USA	2
Croatia	1
Turkey / MoH	2
USA	1
Germany	1
Uganda / NDA	2
USA	1
Bulgaria	1

It is reported that Australia, Brazil, Kenya, Spain, Ukraine, and the UK conducted one paper-based inspection

PAPER - BASED INSPECTIONS - MESSAGE FROM EFPIA

Information Provided by the Site can Follow a Commonly Agreed Standard for Paper Based Inspections



Site



- Site Master File (SMF)*

Product



- Annual Product Quality Review

Pharmaceutical Quality System



- Site Quality Manual

Additional information



- List of inspections / audits



Adobe Acrobat Document

Enhanced GMP/GDP Inspection Efficiency, EFPIA, Position Paper 19. May 2014.



Adobe Acrobat Document

Optimising the GMP paper based Inspection Process EFPIA, Position Paper 26. June 2019.

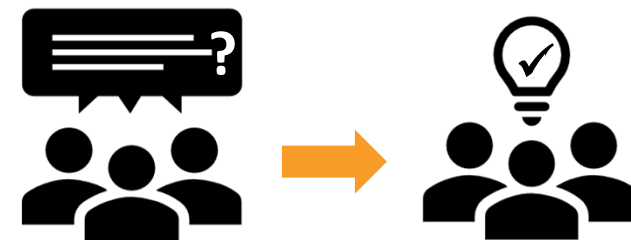
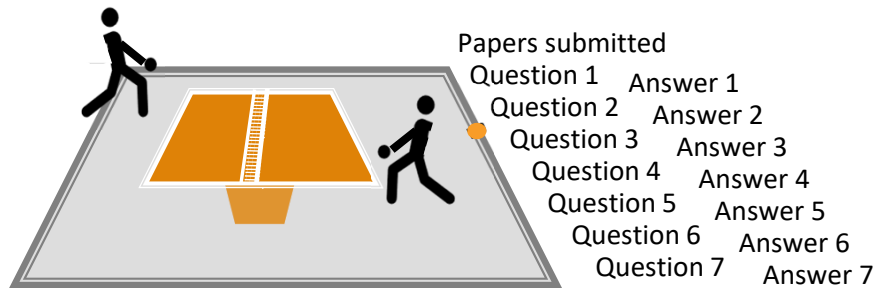
*EXPLANATORY NOTES FOR PHARMACEUTICAL MANUFACTURERS ON THE PREPARATION OF A SITE MASTER FILE, PIC/S PE 008-4, Annex 1, January 2011

EFPIA ANNUAL INSPECTION SURVEY - 2019 DATA

GMP-INSPECTION RELIANCE, PIC/S GUIDELINE PI 048-1, 01 JUNE 2018, CHAPTER 5.3.1

REFLECTING ON EXPERIENCE PROVIDED IN THE SURVEY ANSWERS 2019

The 'Paper Based Inspection' Tool could be Used More Effectively



Inspector <-> Site
translation enabled

OUTLOOK ON E-TECHNOLOGY ENABLED INSPECTIONS

Considerations for Utilizing a Video Call Technology Replacing a Physical Presence of Inspectors in a Controlled Way



Videocall technology can replace on-site inspections for discussions and interviewing staff



Similar to on-site inspections, such discussions are not recorded - notes can be taken



There might be the need for multiple videocall transmissions and translation simultaneously

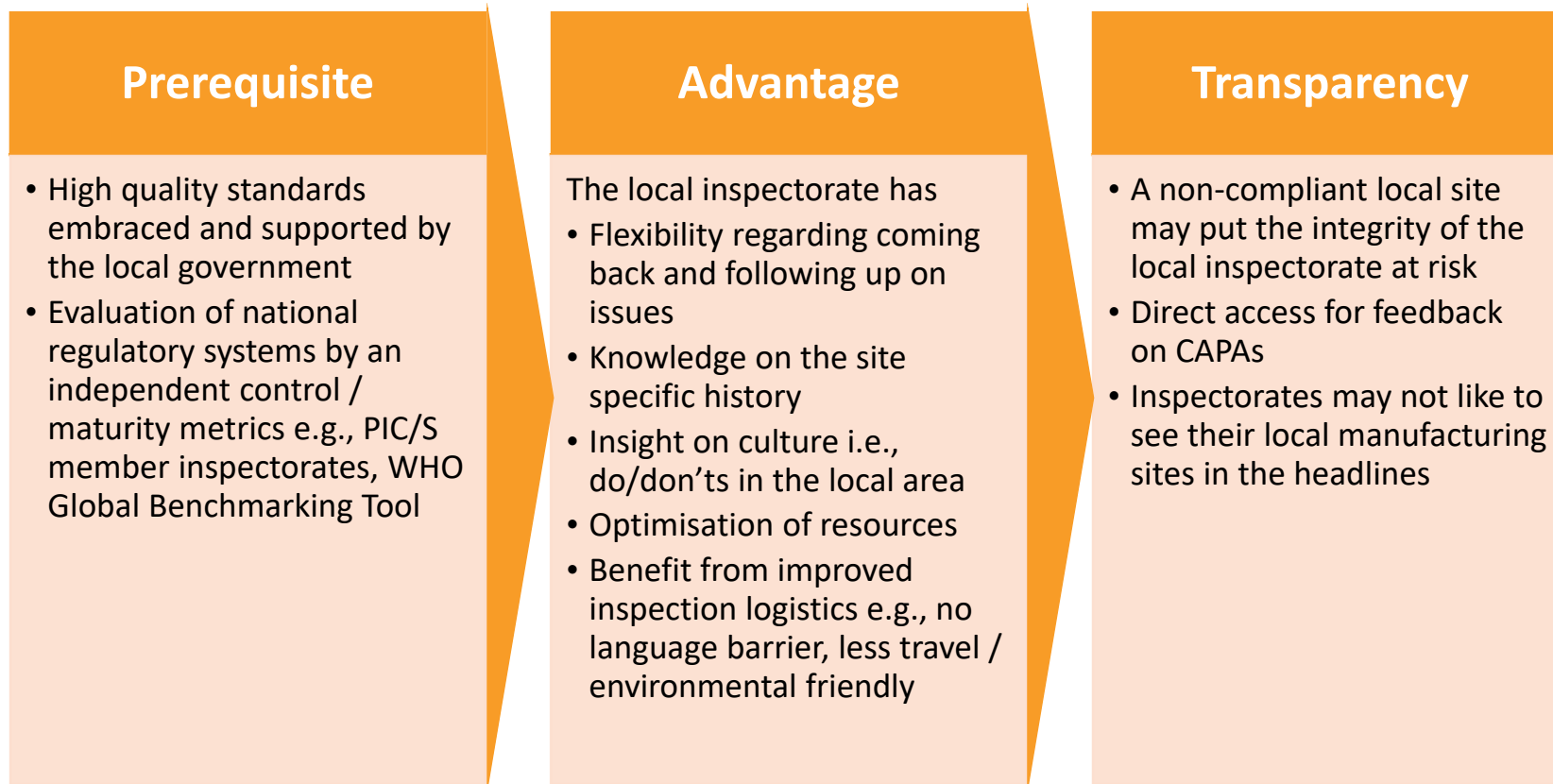


There may be significant issues with privacy, security standards for software / transmission mode used and EHS



CONSIDERATIONS ON INSPECTION RELIANCE

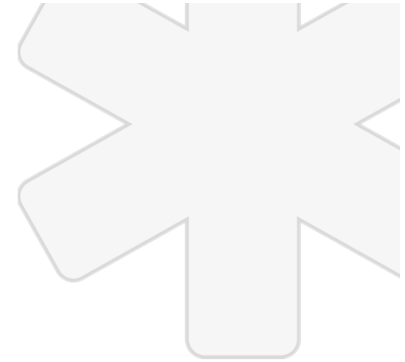
Industry Considerations on Joint Advantages of Inspections by Supervisory Authority



Inspections by a local inspectorate can be more efficient and mature than an inspection by a 3rd country

CONSIDERATIONS ON INSPECTION RELIANCE

We will Monitor if the COVID-19 Pandemic Situation Encourages Inspection Reliance



Travel is prohibited

- Agencies are forced using alternative approaches



Reliance is implemented

- GMP inspections reliance, *PIC/S guideline, PI 048-1, 1 June 2018*



Call for Action by industry and regulators

- Lessons learned: Was inspection reliance used to assure quality and compliance? If so, how?



The New York Times: Restrictions and Bans Globally: Updating ...

On March 15, the Kenyan government announced the suspension of all travelers ... has suspended all flights to Algeria, Belgium, China, France, Germany, Italy, the ... Additionally, any foreign traveler who has visited high-risk countries in the past 20 ... citizens — must undergo 14 days of quarantine and a health inspection.



TGA Suspends Overseas GMP Inspections and QMS Audits Until Further Notice

(Posted Mar 19, 2020)

Consistent with the Australian Government's latest travel restrictions, the Therapeutic Goods Administration (TGA) has suspended overseas GMP (Good Manufacturing Practice) inspections and QMS (Quality Management System) audits until further notice.

In addition to our commitment to ensuring that overseas manufacturers meet GMP and QMS requirements, we are also mindful of the need to provide transparent information to sponsors affected by these delays. Sponsors immediately affected by the suspension to GMP inspections have been contacted and, where applicable, advised about maintaining the validity of their existing GMP clearances.

Conclusions and Opportunities for Controlled Regulatory Flexibility



Establishing remote desktop review tools as alternative and complementary reliance concept

- Sharing experience between regulators and discuss opportunities with industry
- Enabling the compliance decision supporting local registration and licencing processes
- Developing a commonly accepted set of documents to be submitted prior to, or as alternative to, an on-site inspection would be beneficial - for example by PIC/S



Facilitating trade through aligned and reasonable regulatory expectations

- GMP/GDP at Marketing Authorisation Holders / affiliates locally
- Proportionate transparency to be provided in the drug shortages prevention



Leveraging inspection reliance as a benefit from PIC/S and MRAs

- Implement recognition of the inspection part of PAIs
- Recognise of inspections in 3rd countries
- Continue the discussion on the extension on the scope of any MRA in this regard

EFPIA'S ANNUAL INSPECTION SURVEY

Additional References



* Guidance for inspectors

- * PIC/S, A recommended model for risk-based inspection planning in the GMP environment Guideline, *Guideline PI 037-1*, 01. Jan 2012
- * PIC/S, GMP Inspection reliance, *Guideline No PI 048-1*, 01. June 2018
- * PIC/S, Classification of GMP Deficiencies, *Guideline No PI 040-1*, 01. January 2019

* Scientific Papers

- * S. Rönninger, P. Gough, V. Davoust, **Opportunities for Saving Resources in the Regulatory Inspection Process: Mutual Recognition Agreements (MRA) Example EU/US**, *Pharm. Tech. Japan*, 35, 2019, 15-25.
- * A. Meshkovskij, S. Rönninger, **National GMP Inspection Practice for Biotech Pharmaceuticals: Commonalities, Differences, Opportunities**, *CIS GMP News*, 2018, 1, 26-31. <https://gmpnews.net/magazine/gmpnews-eng-2-1-2018/#page/26>
- * H. Jin, N. Carr, H. Rothenfluh, TGA, **Medicines Regulations: Regulating Medicines manufacturers: Is an onsite inspection the only option?**, *WHO Drug Information*, 31/2, 2017, 153-157.
https://www.who.int/medicines/publications/druginformation/issues/WHO_DI_31-2_RegMedManufs.pdf
- * EMA, WHO, TGA, US-FDA, EDQM, Council of Europe, ANSM, DMA, HPRA AIFA, MHRA, **Report on the International Active Pharmaceutical Ingredient Inspection Programme 2011 – 2016**, March 2018, 1-13.
- * S. Rönninger, J. Berberich, V. Davoust, P. Kitz, A. Pfenninger, **Landscape of GMP/GDP inspections in research-based pharmaceutical industry, Part I: Data**, *Pharm. Tech. Europe*, January, 2017, 6-10.
<http://www.pharmtech.com/gmpgdp-inspection-landscape-part-i-data> ; **Part II: Considerations and Opportunities**, *Pharm. Tech. Europe*, February, 2017, 5-9.
<http://www.pharmtech.com/gmpgdp-inspections-landscape-part-ii-considerations-and-opportunities>
- * A. Meshkovskij, S. Rönninger, **GMP Inspection practice: a case for global benchmarking, convergence and mutual reliance/recognition**, *The GMP News*, 2017, 2-9 (Rus).
- * EFPIA Annual Inspection Survey, results 2018 https://www.efpia.eu/media/361849/efpia-2018-reg-inspection-survey_public-summary.pdf

* Industry Position Papers

- * EFPIA: **Enhanced Good Manufacturing and Good Distribution Practices (GMP/GDP) Inspection Efficiency**, 19. May 2014.
- * EFPIA / PhRMA: **A Concept for Harmonized Reporting of Inspections**, 29. May 2015; *addendum of the PhRMA White Paper: 'Mutual Recognition of Drug GMP Inspections by U.S. & European Regulators'*, 15. May 2015.
http://www.efpia.eu/uploads/EFPIA_Position_Paper_A_Concept_for_Harmonized_Reporting_of_Inspections_final.pdf
- * IFPMA: **Convergence of Good Manufacturing Practice (GMP) standards and Related Inspections**, IFPMA Position paper, June 2017; update January 2020. <https://www.ifpma.org/wp-content/uploads/2017/06/IFPMA-Position-on-GMP-Convergence-Final-9June2017.pdf>
- * IFPMA **Infographic**: https://www.ifpma.org/wp-content/uploads/2018/02/GMP_IFPMA_02-20-2018-WEB.pdf

ACKNOWLEDGEMENT

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