Regulatory Experiences on Plasma Quality and Plasma-derived Medicinal Products in Singapore

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Outline

- Introduction
- Regulation of plasma-derived medicinal products
- Plasma Quality
- Product quality

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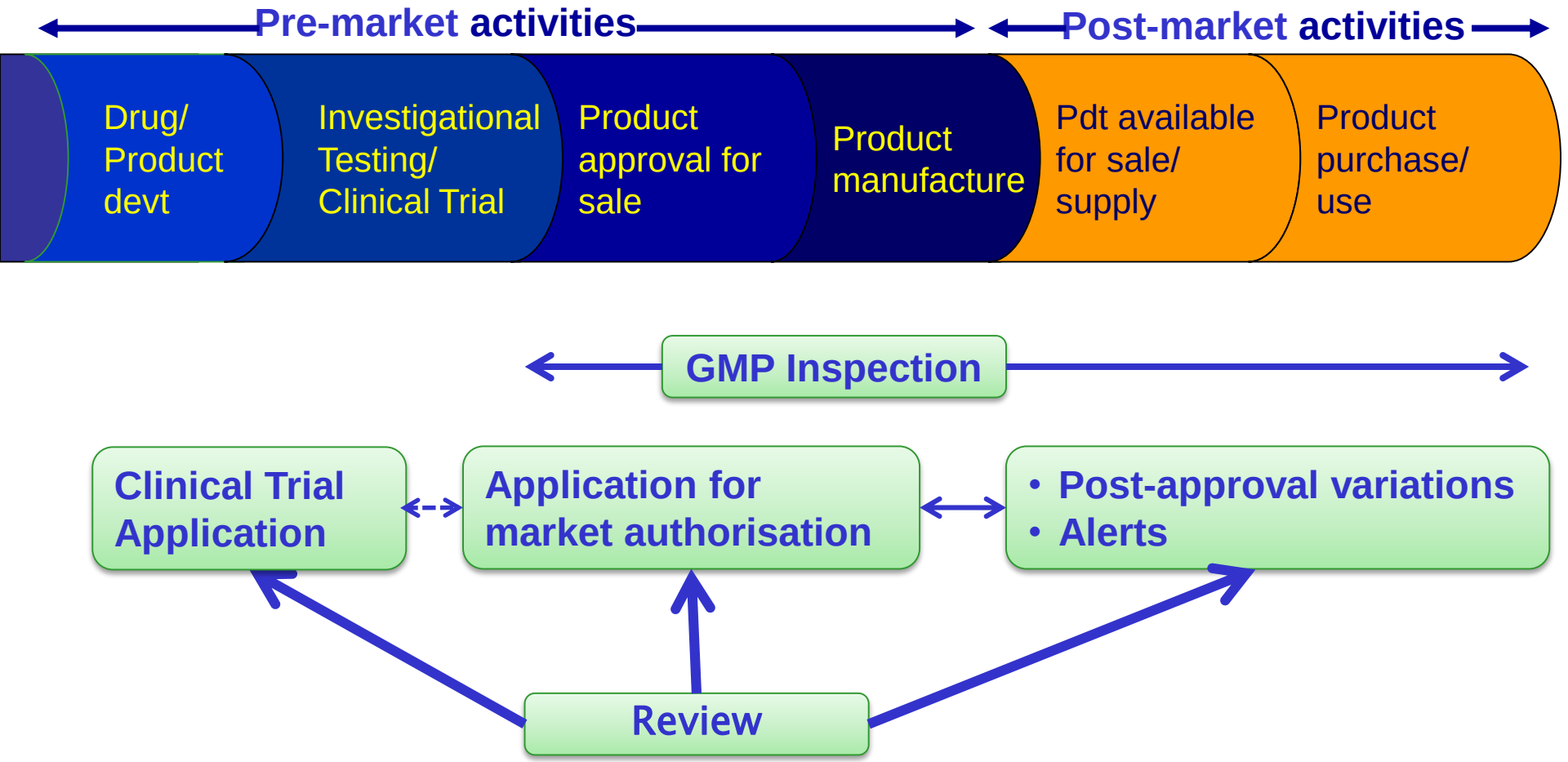
HSA Functions & Roles



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Product Regulation

Product Life Cycle Approach in Licensing



Risk-based and Confidence-based Assessment

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Product Registration

Medicinal Product Application

Evaluation by HPRG staff & External Experts

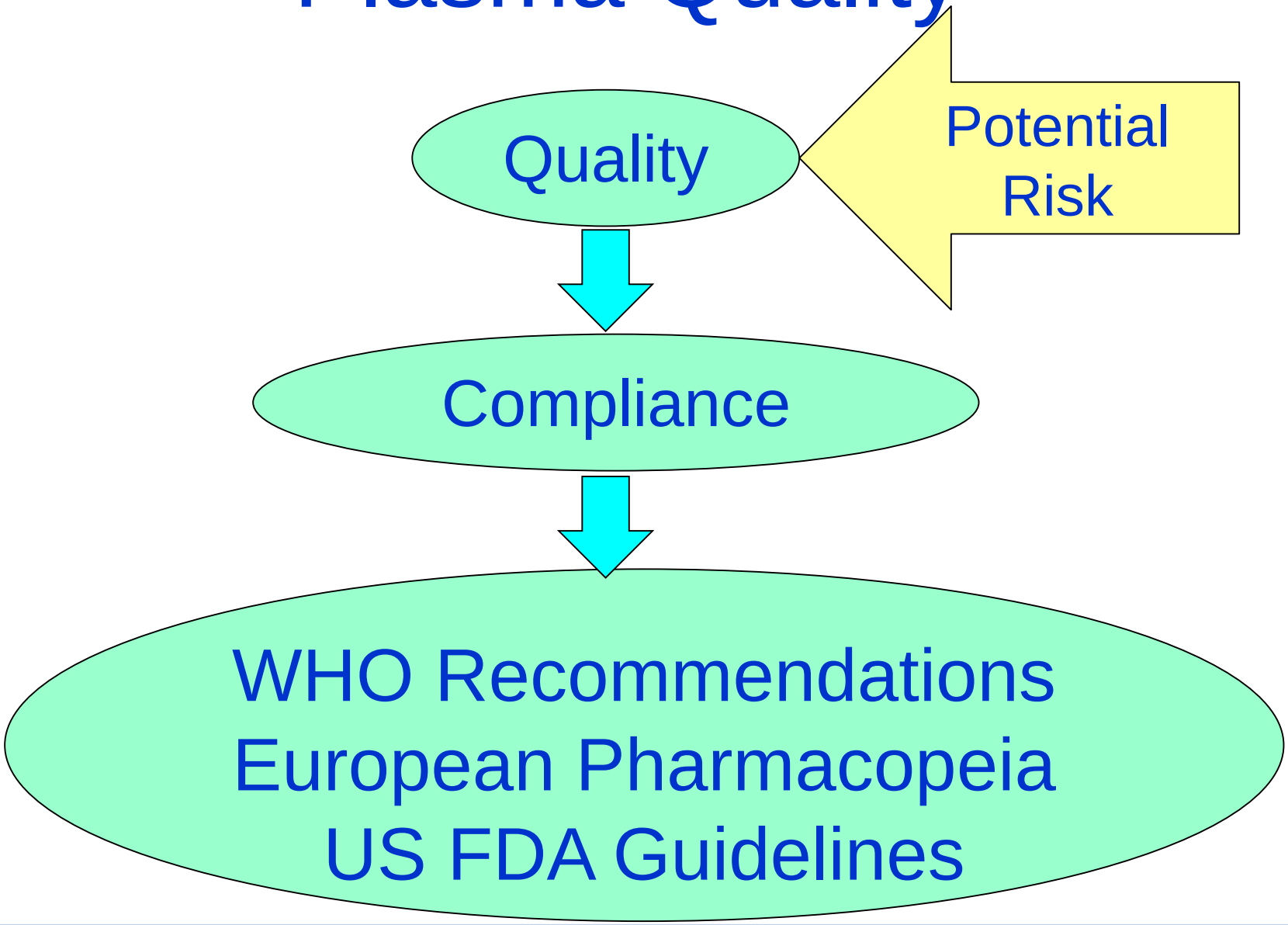
- Clinical
- Quality
- Non-Clinical

- Deliberation by Expert Panel
- Deliberation by Medicines Advisory Comm

Regulatory Decision

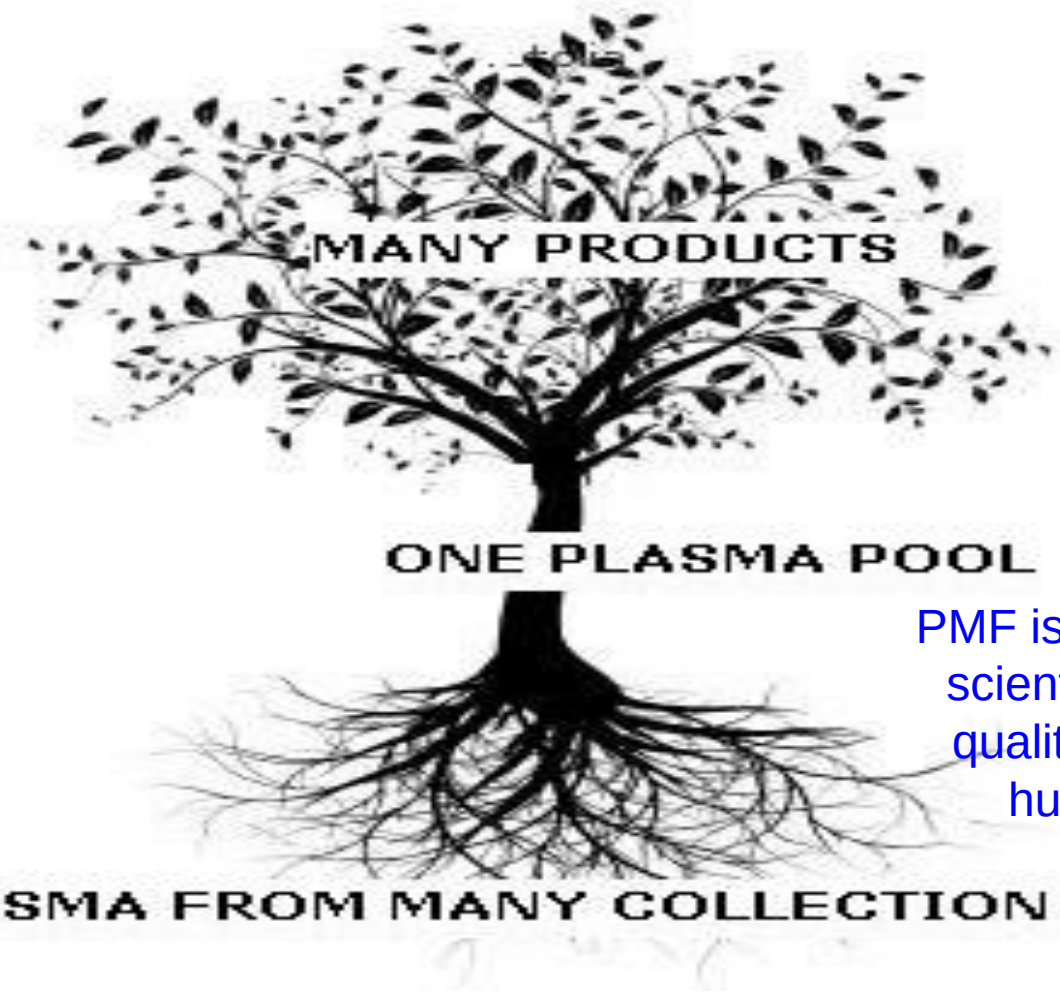
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Plasma Quality



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Plasma Master File (PMF)



PMF

PMF is a compilation of scientific data on the quality and safety of human plasma

Courtesy: Dr Glenda Silvester, European Medicines Agency

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PMFs and plasma Source

Global Source
18 PMFs

Plasma Sources
18 countries
USA, Austria, Belgium, Germany, Netherlands, Hungary, Switzerland, Czech Republic, Sweden, Norway, Poland, Estonia, Finland, Luxembourg, Slovakia, Slovenia, Canada, Singapore.

Singapore
Plasma
1 PMF

3 Products
Immunoglobulin
Albumin
Factor VII & VWF

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Review of Plasma Quality

- Plasma source & collection
- Characteristics of donations
- Epidemiological data
- Selection / exclusion criteria
- Plasma quality and safety
- Storage & transport
- Specification
- Plasma pool batch analysis data

Risk-based & Confidence-based Assessment

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Traceability of Plasma

PRISM

Pharmaceutical Regulatory Information system

Declaration of Information

Type of product

Use

Source

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Challenges with Submission (1)

- PMF not available
- Incomplete information
- Unable to confirm source
- Lack of traceability

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Challenges with submission (2)

- PMF holders are maintaining PMFs which cater for different markets
- PMFs different from the PMF approved by EU
- PMF is claimed to be “International PMF” or “PMF for non-EU region”
- Not approved by EMA or any HSA reference agencies

HSA Reference Agencies : TGA, FDA, EMA, Health Canada, MHRA

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How was the challenges handled?

- Confirmation & clarification on differences between PMFs
- Clarification on blood collection & testing centres
- Approval status of blood collection centres by local authority.

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How was the challenges handled?

- Testing centres are audited
- Virus testing methods are validated
- Assess epidemiological data
- Data and information conform to international requirements

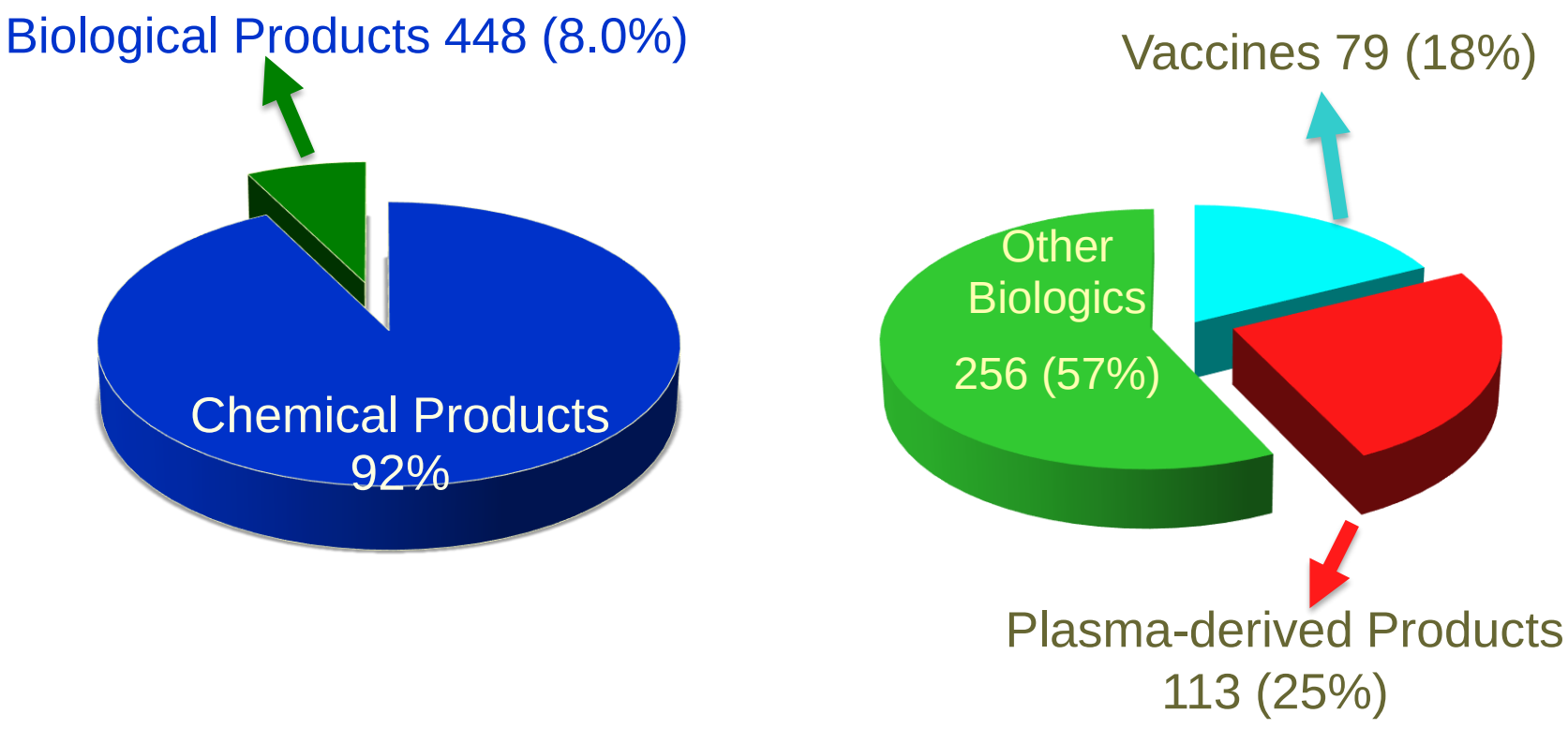
Submission Issues has Impact:
Delay or unable to register products

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Product Quality

Plasma-derived products registered

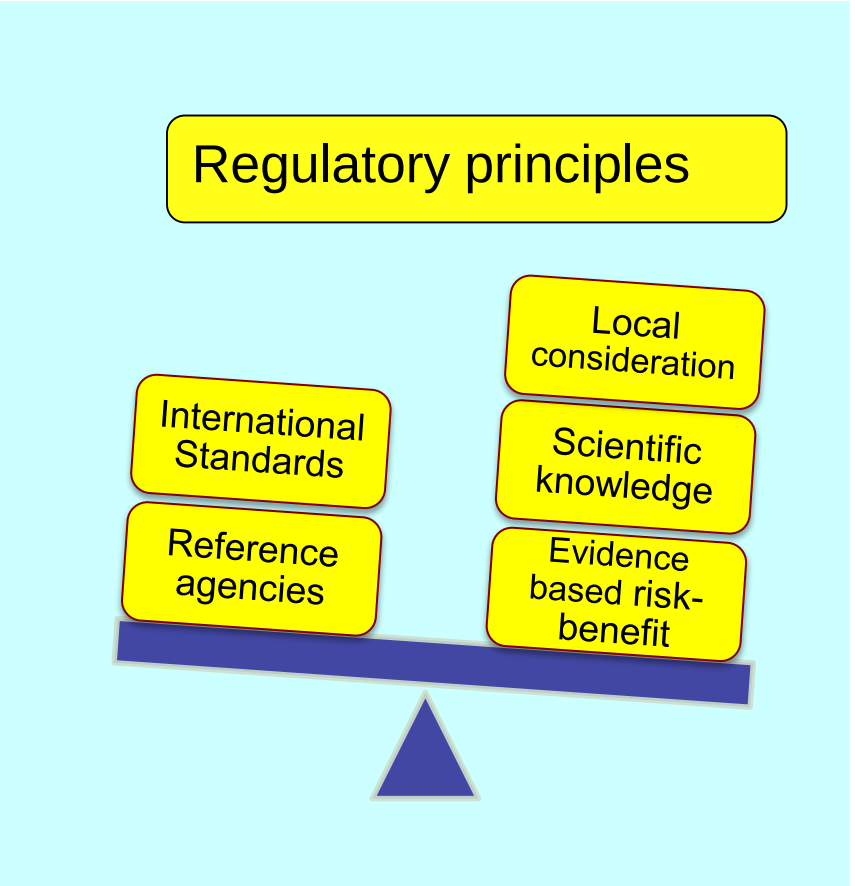
(February 2016)



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Risk-Benefit Assessment

- Quality (CMC)
- Non-clinical safety
- Clinical benefit
- Safety, disease profile & prognosis
- Alternative therapies
- Scientific, clinical & regulatory perspectives



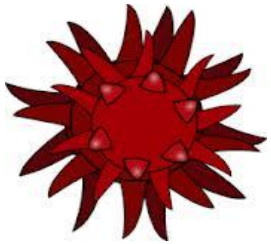
Ensure quality, safety & efficacy of products and to Safeguard Public Health

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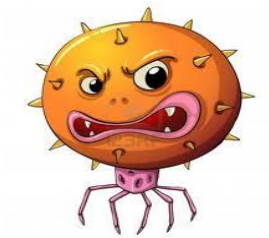
Rigorous attention to safety



Hepatitis A, B & C



HIV



Parvovirus B19



Selection of starting materials

Inactivation/removal



Variant CJD



Emerging Infection

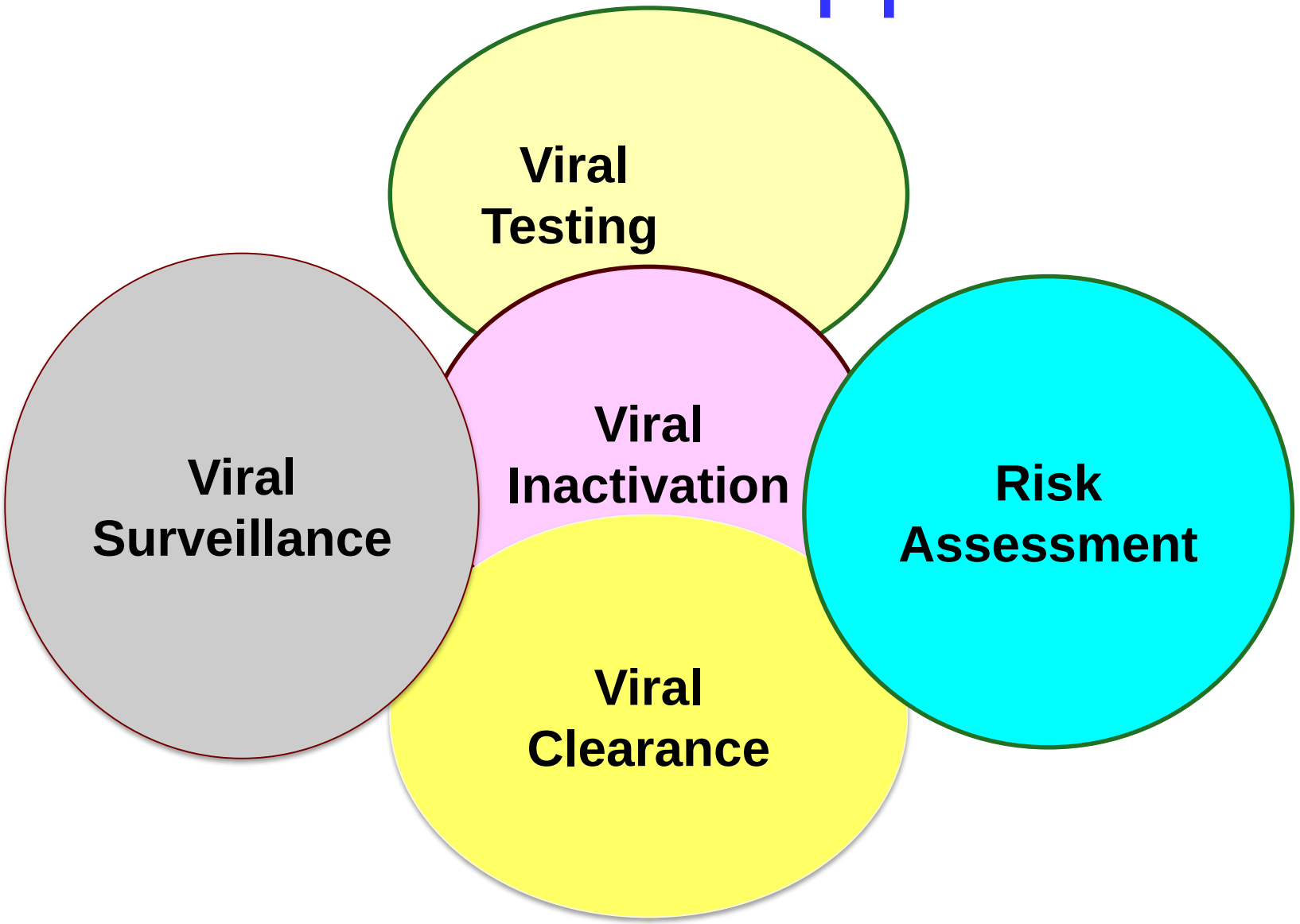
Testing

Defence against Infection

Courtesy: Dr Glenda Silvester, European Medicines Agency

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Holistic Approach



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Post-approval Condition

Licensing Condition

The import of the product must be accompanied by a batch certification.

The batch certification and product movement records shall be maintained for 10 years from the date of importation and be made available upon request

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Challenges

- Grandfathered products not meeting current requirements e.g., viral clearance & Clinical data
- Inadvertent contamination during manufacture
- Difficult regulatory action:
  - non-approval
  - recall, quarantine
  - conditional release
  - lack of alternatives
  - supply issues

Addressing the challenges by co-operation by industry and collaboration with international regulators

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Conclusion

Quality of plasma and plasma-derived products are the underpinning of safety and efficacy

The overall goal of regulation is to ensure that only products of demonstrated quality, safety and efficacy are used

Plasma and plasma-derived products are well controlled and safe due to high level of compliance by the industry stakeholders and robust regulatory oversight

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A regulator's job is never done!

