Increasing access to essential PDMP medicines:

Perspectives from WHO, barriers to progress and strategies

IPFA/BCA Global Symposium on
"The Future for Blood and Plasma Donations"
29 September 2015, Fort Worth/Dallas, USA

World Health Organization

A global perspective

- A WHO review of the volume of plasma separated from whole blood that was wasted worldwide in 2013 indicated that this was of the order of 9.3 million litres each year.
- In order to prevent wasting such a valuable resource there is a need to build and improve local capacity for the collection of blood/plasma which could then be made available for the manufacture of life-saving derivatives.
- This needs to be linked with strengthening blood regulatory systems

The Political Mandate for Strengthening Blood Regulation: WHA R63.12, May 2010

- WHA resolution 63.12 recognized that:
  - "stringent regulatory control is vital in assuring the quality and safety of blood products…" and
  - urged Member States to "update their national regulations … in order to ensure that regulatory control in the area of quality and safety of blood products across the entire transfusion chain meets internationally recognized standards."
- Strengthening regulatory systems for blood products and building technical capacity of national and regional blood regulatory authorities is recognized as a fundamental need to assure global availability of safe blood products

WHO's normative support to PDMP-Essential Medicines

- Development of WHO Guidelines and Recommendations to support effective blood regulatory systems
- Establishment of WHO biological reference preparations for blood products and related biologicals
- Implementation of Resolution WHA63.12 on Availability, Safety and Quality of Blood Products:
  - Upgrade production standards in blood establishments and its regulatory oversight so that countries could have local capacity to produce plasma for fractionation.
  - Assistance in the development of legal frameworks

TECHNICAL CAPACITY BUILDING TO STRENGTHEN LOCAL PRODUCTION CAPACITY

TWO EXAMPLES

The "Achilles" project
Overall Goals (*WHA Resolution 63.12*)

- To make safe blood products available to patients
- To raise quality standards in blood establishments (BE)
- To reduce risk of transmission of infectious diseases

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The "Achilles" project
What do we already have?

- The mandate
  - WHA 63.12 on availability, quality and safety of blood products
- The tools (internationally agreed standards)
  - WHO Guidelines on GMP for blood establishments
  - WHO Guidelines on Production, control & regulation plasma for fractionation
  - WHO Guidelines on Viral Inactivation and Removal procedures
  - Biological reference materials: blood products and blood safety IVDs
  - Assessment criteria for national blood regulatory systems
- Access to government organizations: national regulatory authorities and Inspectorate
  - Training experience strengthening implementation of regulatory systems
  - Coordination of international expertise: ECBS, BRN, WHOCC, ICDRA
  - Worldwide network of National Regulatory Authorities
  - Expertise from other quality assurance programs in WHO
  - Support from WHO Regional Offices and Country Offices

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Specific issues in developing countries

- Lack or poor access to safe blood products
- Wastage of plasma
- Risk of transfusion-transmitted diseases
- Poor plasma production culture
- Lack or poor regulation of blood products
- Lack of reporting systems

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The WHO Achilles project (I) Indonesia a pilot country

- Strong governmental commitment – The Ministry of Health prepared a decree conferring regulatory authority for the entire system to a single regulatory agency (NADFC)
- The regulatory structure for medicines including biological products is in place and there is a strong commitment to regulate blood establishments and blood products.
- The ethical and economic loss related to discarded plasma is recognized
- The key personnel for the Ministry of Health, the Red Cross and the National Regulatory Agency are knowledgeable, committed, and collegial. All of them want this to succeed.

The WHO Achilles project (II) Indonesia a pilot country - Challenges

- Consolidation of blood services as single system, a geographical challenge.
- Small hospital facilities will not be capable of GMP production – however these facilities do not currently produce plasma and the Ministry is committed to bringing them up to standard
- There are multiple small laboratories for donor screening tests – consolidation is both necessary and inevitable.
- The authority for validating tests is located in another section of the Ministry of Health and this responsibility needs to be reconciled
- Resources for regulatory investment have not yet been committed and a governmental zero growth policy is in place.

WHO Achilles project (III) Indonesia a pilot country

- In summary, the positives are many and the negatives are both recognized and amenable to modification.
- A program using WHO educational materials and resources along with the regulatory expertise of the collaborating centers and GMP specialized inspectors could make a major impact on this system.
- A work plan is being implemented to address:
  - Training in GMP for blood establishments to NADFC inspectors and QA personnel in blood establishments (Red Cross and MoH)
  - Training on evaluation of blood safety and blood testing technologies

WHO Workshop on Blood Regulatory Systems

Building national capacity for improving access to blood products

Johannesburg, 9-11 September 2013

Hosted by the South Africa National Blood Service

Participants:

Leaders of National Regulatory Authorities and National Blood Systems

The AfSBT and 11 Sub-Saharan countries

Objectives:

a) Implementation of standards in blood establishments and production capacity at national level;

b) Implementation of national regulatory systems

c) Emphasis for regional cooperation to harmonise standards and guidelines for registration and regulation

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Recommendations

- WHO should prioritise and take steps towards capacity building of blood establishments and blood products regulation through implementation of GMPs in blood establishments including in vitro diagnostics, standards, reference materials and devices.

- WHO should support and encourage the advance and harmonisation of blood regulatory systems through regional community and political structures.

- WHO should promote the "twinning" of well and less well-resourced blood establishments as a strategy to support capacity building through training of trainers and sharing of best practice.

WHO Workshop on Blood Regulatory Systems

Building national capacity for improving access to blood products

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- NRAs should add *blood products* to their regulatory portfolios; this where feasible could include recognition of whole blood and blood components as medicines.

- All countries should strive to reduce or eliminate wastage of *surplus plasma* by assuring that the production of plasma complies with internationally recognised GMP standards and is suitable for fractionation.

- Countries of the region should assess their needs and status and establish and/or strengthen the legal framework, independent authority, resources and infrastructure of the NRA for regulation of blood establishments and blood products against defined standards.

Workshop on regional strategy for blood safety and national blood regulation

Cotonou, Benin, 23-25 September 2015

- Blood Regulators and Operators from anglo- and francophone African countries

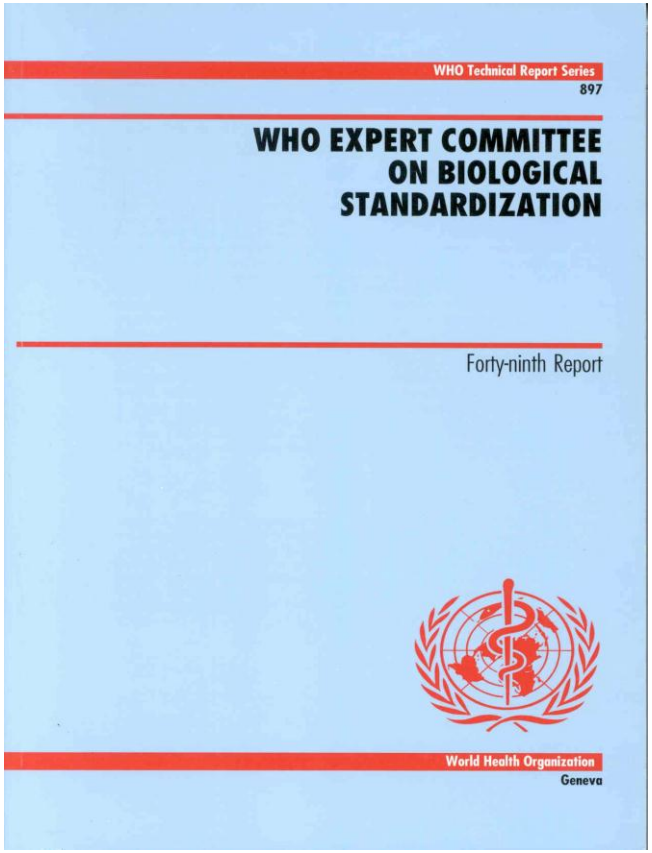
  Benin, Burundi, Cote de Ivoire, Ethiopia, Ghana, Kenya, Senegal, South Africa, Tanzania, Zimbabwe

- Definition of Regional Strategies for
  - Blood Safety
  - National blood regulatory systems

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WHO global standards and norms

Global written standards



Global measurement standards



Measurement standards:
tools for product development, licensing and lot release

Global nomenclature standards

International Nonproprietary Name (INN)

A single name for a substance for use globally

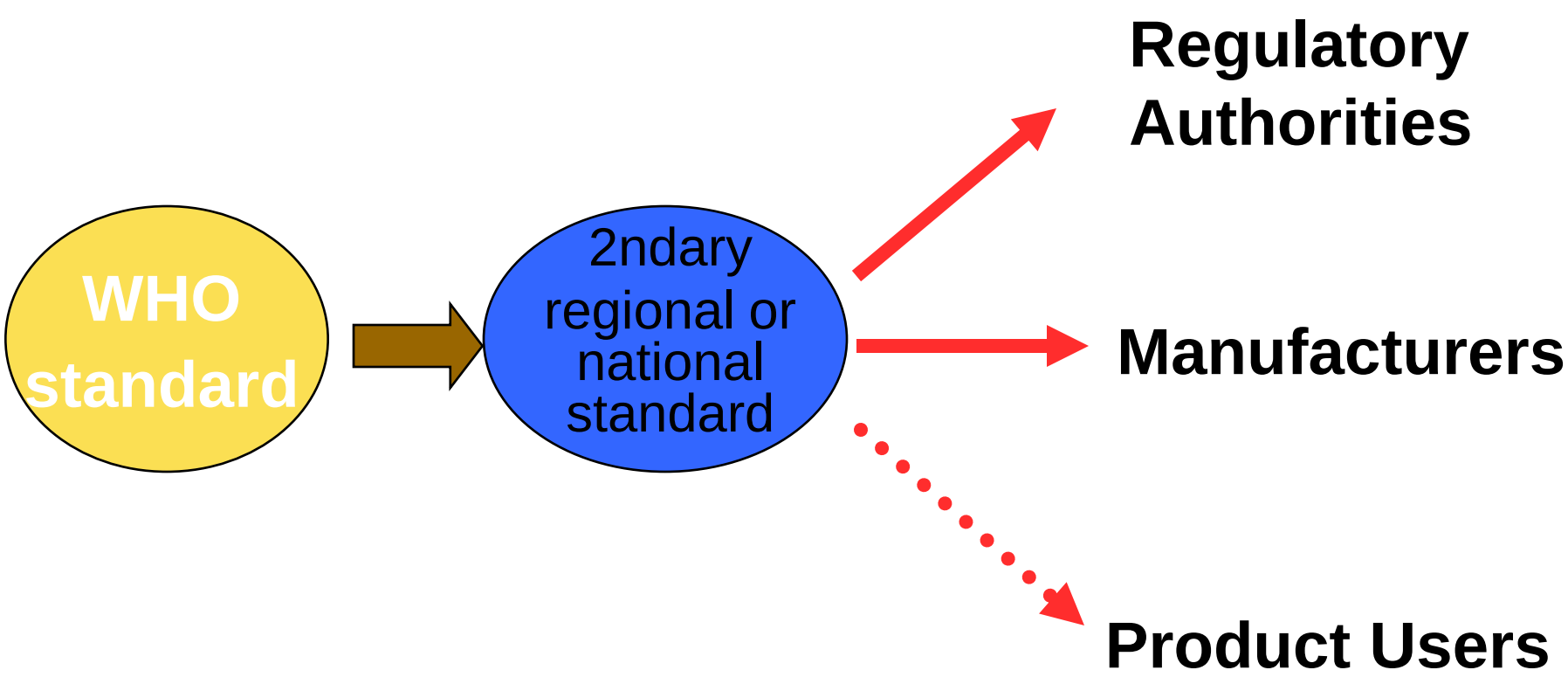
Expert Committees report to the WHO Executive Board: all countries can contribute to development of standards





WHO Global Standards

Tools to promote regulatory convergence



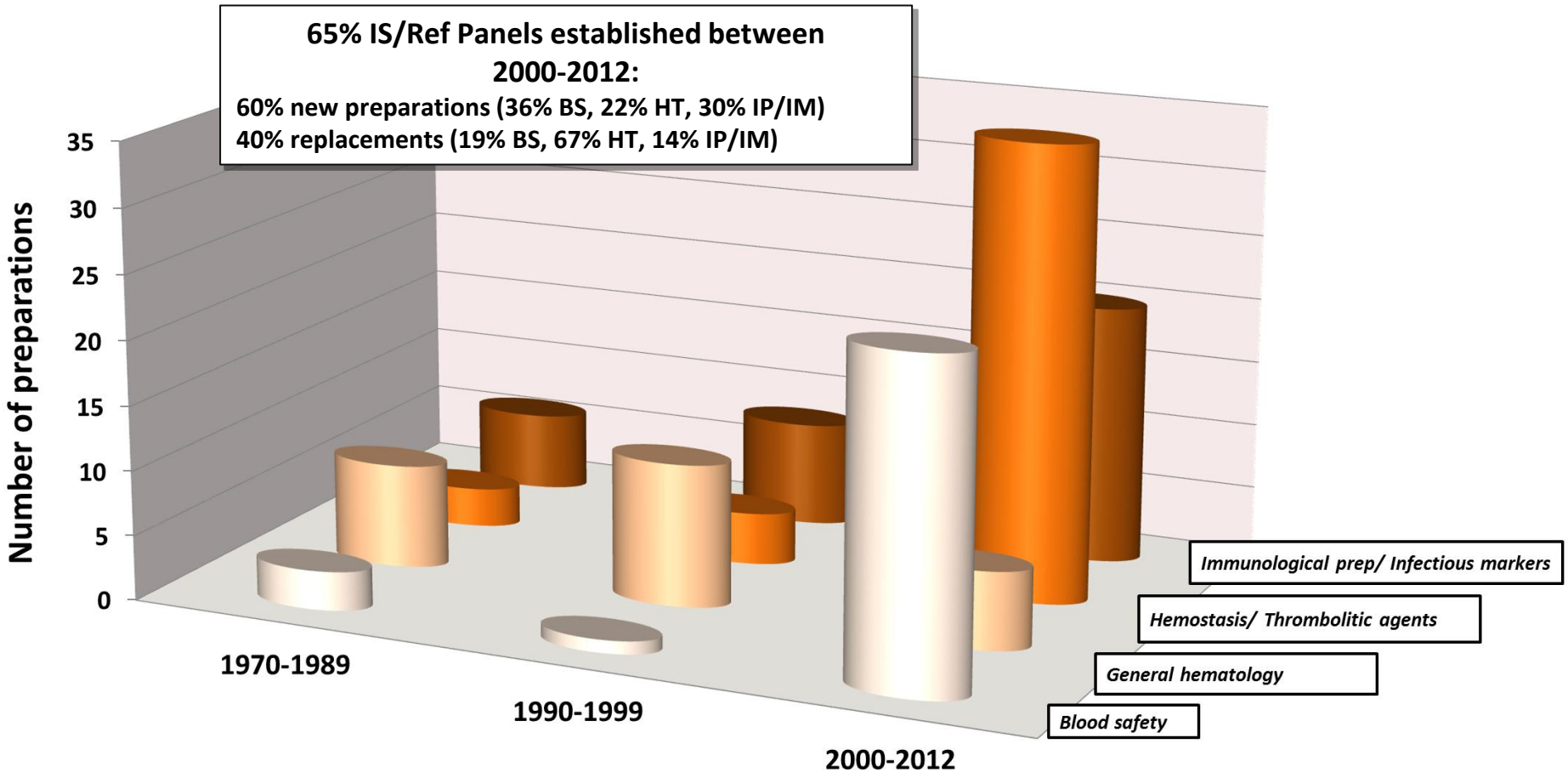
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New WHO written standards under development

- WHO guidelines on risk assessment based on donor epidemiology and different testing strategies,
- WHO guidelines on the design and calibration of secondary reference preparations.

WHO Biological Reference Preparations

Blood Products and related Biologicals



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Proposals to the ECBS (2015)
I. WHO Biological Reference Preparations

- Reference preparations for establishment:
  - anti-A and anti-B in serum and plasma

    - Proposed WHO Reference reagents for anti-A and anti-B haemagglutination assays
  - Blood Coagulation Factor IX, Concentrate

    - Proposed 5th International Standard

Proposals to the ECBS (2015)
II. WHO Biological Reference Preparations

Proposed new projects

- Intravenous immunoglobulin

  Endorsement of a new project to develop a reference preparation panel containing procoagulant activity in IVIG

- Blood Coagulation Factor X, Activated, (FXa), Human

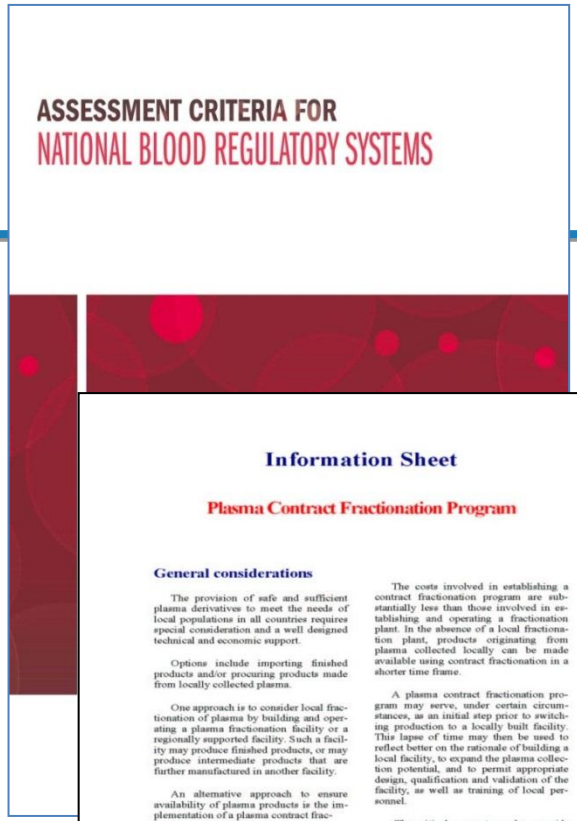
  Endorsement of a new project to develop the 1st WHO IS

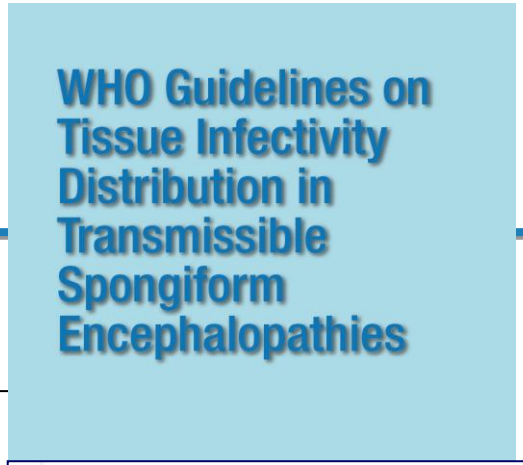
- Thromboplastin, recombinant, human

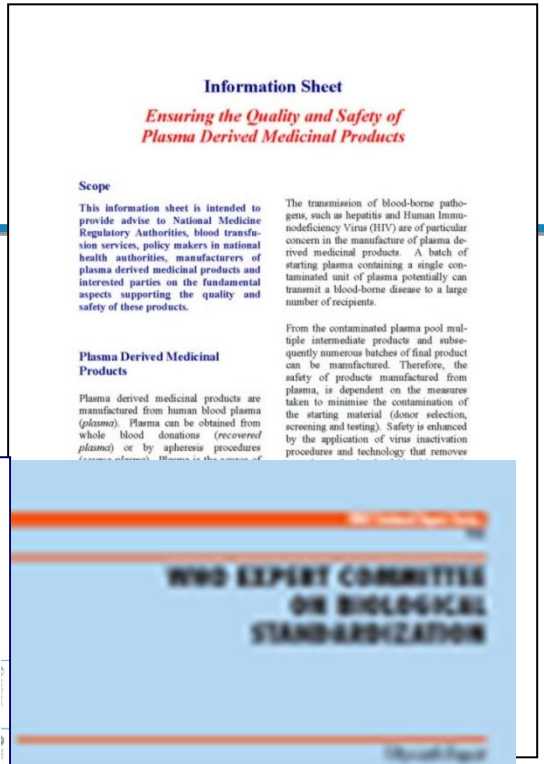
  Endorsement of a new project to develop the 5th WHO IS

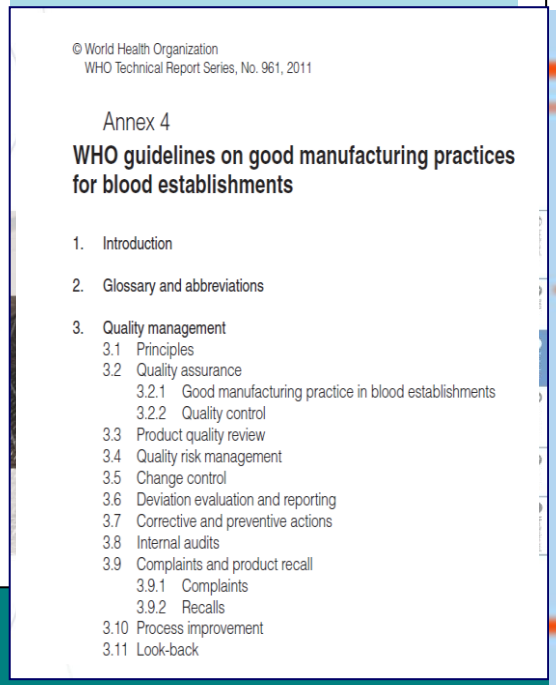
- Thromboplastin, rabbit, plain

  Endorsement of a new project to develop the 5th WHO IS











”Web site”

http://
www.who.int/bloodproducts

Health
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http://www.who.int/bloodproducts

http://www.who.int/bloodproducts/snakeantivenoms