PHARMA & BIOPHARMA OUTSOURCING ASSOCIATION

Advancing the regulatory, legislative, and general business interests of the pharmaceutical and biotech services community

May 7, 2025

Bureau of Industry and Security
Office of Strategic Industries and Economic Security
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

To whom it may concern,

On behalf of the Pharma & Biopharma Outsourcing Association ("PBOA"), a trade association representing Contract Manufacturing Organizations (collectively "CMOs") and Contract Development & Manufacturing Organizations ("CDMOs"), I am pleased to offer feedback on the recent docket Notice of Request for Public Comments on Section 232 National Security Investigation of Imports of Pharmaceuticals and Pharmaceutical Ingredients [Docket No. 250414-0065] / XRIN 0694-XC120.

CDMOs play a critical role in the healthcare ecosystem, providing development and manufacturing services to pharma and biopharma companies large and small, innovator and generic. CDMOs manufacture ~40% of all finished doses of innovator (NDA, BLA) drugs, and have supported almost every new drug approved by the FDA in the last decade. Our members and their peers empower innovation by enabling biotech startups to focus on R&D without having to invest in their own facilities. Further, non-U.S. startups often work with our members to facilitate the U.S. launch of their new drugs.

CDMOs generally do not own the drugs they develop and manufacture for their clients, and generally do not select vendors to source key starting materials; they may, however, directly produce biologic drug substances onshore, including proteins and gene and cell therapies. Also, CDMOs are not involved in drug pricing, market access, or reimbursement decisions. Rather, the primary focus of CDMOs is ensuring a reliable and consistent supply of drugs for patients which meet the safety and efficacy standards our customers agree upon with the FDA and other regulators.

Most of our member companies are based and operate in the U.S., and our members support targeted incentives to further leverage existing robust onshore supply capacity to serve U.S. patients, and to expand such capacity where needed. Incentives might include tax incentives, federal contracts and regulatory streamlining to promote investment in new and more use of existing domestic manufacturing capacity, but should not ignore the role that our trading partners play in assuring safe, high-quality, accessible medicines. Other countries play a pivotal role in providing a resilient global supply chain for the pharmaceutical industry, while minimizing healthcare-cost inflation.

Since 2020, CDMOs have spent or committed more than $7 billion on building and expanding capacity in the U.S., with more investments to come, including facilities for sterile injectables, cell and gene therapies, antibody-drug conjugates, oral dose forms, and more. Our members develop and invest in advanced manufacturing technologies to help clients produce innovative treatments for patients. These investments follow the industry pipeline and customer demand needs, and have helped strengthen the U.S. manufacturing base for pharmaceutical products. We believe that federal government focus to encourage more effective innovator drug company use of *existing* onshore CDMO capacity, and support of expansions thereto, would require fewer government incentives, with lower risk and faster results, than would a program primarily focused on constructing new bricks-and-mortar capacity (with much higher investments and longer timelines).

We believe that long-term pharmaceutical-related tariffs will not bring about material onshoring of innovator drug (NDA, BLA) pharmaceutical production currently off-shore, and would also harm long-term competitiveness

of the domestic CDMO industry for the export of such products (currently estimated at ~$40B of export value to CDMO clients). Our members are concerned that tariffs on the importation of processing equipment and components such as vials, stoppers, bioprocessing materials and other consumables, as well as on on imported KSM for onshore small molecule Active Pharmaceutical Ingredient (API) production, will drive substantially larger costs, and thus reduce global competitiveness of domestic CDMOs for biopharmaceutical exports.

CDMOs in the U.S. are sensitive to workforce/labor costs relative to other countries, and they must compete for talent with the pharma companies themselves. Adding cost through tariffs on importation of key goods will only make it more difficult for them to compete and build a strong manufacturing infrastructure.

We provide a list of HTS codes in the Appendix beyond those currently included in the small molecule API-based exclusions, and request that these classes will be exempted – especially for those items, including bio-production supplies and components, not manufactured in the U.S. or available in sufficient quantities to meet domestic demand – lest they lead to materially increased costs, harming global competitiveness and resulting in reduced ability to invest domestically.

Supply Chain Security

PBOA has worked closely with previous administrations and Congresses on the topics of drug shortages and supply chains and looks forward to working with this administration to develop solutions. PBOA has also worked with the Supply Chain Control Tower and other HHS parties to explore onshoring initiatives related to the Essential Medicines List.

The process of decoupling from key U.S. trading partners is complex, can take many years, and would be extremely costly, likely raising the price of affected drugs and other medical products.

Due to the fragility of some (largely generic) essential medicines' supply chains, we suggest that any actions by the U.S. government be targeted and provide a significant runway to prevent supply disruptions and potential shortages of critical medicines.

In the aftermath of Hurricane Maria in 2017, PBOA developed a Congressional proposal for FDA to create a Shortage Manufacturing Establishments (SMEs) list, intended to alleviate or avoid supply chain disruptions when natural disasters or other events take facilities offline. This proposal could be adapted to streamline the process of shifting pharmaceutical products to domestic manufacturing facilities. The SME model would involve existing manufacturing facilities with strong compliance records, not requiring new facilities, rather helping better utilize current domestic manufacturing capacity, while providing business certainty to clients looking to shift production to the U.S. We provide more information about this proposal in the Appendix.

Selected 232 Probe Topics

(ii) the extent to which domestic production of pharmaceuticals and pharmaceutical ingredients can meet domestic demand;

While we believe there may be sufficient dosage form capacity in the U.S. for most innovator drugs, the domestic capacity for small molecule Active Pharmaceutical Ingredients (APIs), Key Starting Materials (KSMs) and other products (such as bioprocessing and packaging materials) is far from sufficient to serve the U.S. market. As such, placing tariffs on such imports will only undermine the ability of manufacturers to make cutting-edge pharmaceutical products in the U.S.

Further, the demand of both ingredients and dosage forms for generic drugs cannot be served by the U.S. manufacturing base. Generics account for approximately 90% of U.S. prescriptions, and the volumes in which they are produced are enormous. The supply chain for generics has been optimized for large-scale manufacturing in low-cost countries; investments to replace this would be massive, carry significant lead time, and could impact healthcare costs across the board, while also leading to short-term disruptions in the supply of generic medicines.

(iii) the role of foreign supply chains, particularly of major exporters, in meeting United States demand for pharmaceuticals and pharmaceutical ingredients;

The supply chain of pharmaceuticals and pharmaceutical ingredients industry is significantly intertwined with multiple countries and trading partners. Likewise, pharmaceutical companies typically make sourcing decisions for innovator drugs on a global basis, often sourcing API/drug substance or finished dose forms from one or two

facilities to support global demand. In the Appendix, we provide a graphic detailing several examples of the global nature of the pharma supply chain, even in cases where the U.S. is the primary site of manufacture. We note that there are "hidden" parts of the supply chain beyond drugs and ingredients; excipients and processing equipment and supplies are not easily exchangeable, and are often only sourced from single countries.

(iv) the concentration of United States imports of pharmaceuticals and pharmaceutical ingredients from a small number of suppliers and the associated risks;

The vast majority of pharmaceutical products and ingredients have multiple sources spread across many countries. However, there is a subset of low-priced generics that have a single country of origin and sometimes a single source. Any disruptions — e.g., industry- or country-specific tariffs — in the supply chain of these drugs can result in severe drug shortages and/or increased healthcare costs. Alternate solutions must be developed for such drugs — e.g., onshoring or finding other trading partners — but as noted, this will take time and require significant incentives.

(viii) the feasibility of increasing domestic capacity for pharmaceuticals and pharmaceutical ingredients to reduce import reliance;

From a CDMO perspective, several factors would increase the feasibility in investment in domestic manufacturing capacity. We have included regulatory and financial proposals in the Appendix.

(ix) the impact of current trade policies on domestic production of pharmaceuticals and pharmaceutical ingredients, and whether additional measures, including tariffs or quotas, are necessary to protect national security; and

Long-term federal contracts tied to products "made in America" could create a more favorable environment for our members' clients to encourage increased domestic manufacturing of FDFs, APIs and KSMs. However, many of the financial incentives that would benefit clients may not have a "trickle-down" effect to CDMOs.

We look forward to working with the administration and Congress to help solve America's pharmaceutical supply chain needs.

Sincerely,

Gil Roth
President
Pharma & Biopharma Outsourcing Association

APPENDIX DOCUMENTS

Potential government incentives to enhance National Security related to the Pharmaceutical supply chain

Unless otherwise noted, the below relates to the development and manufacturing of drug substance/active pharmaceutical ingredients (collectively, "APIs" herein) and finished dose forms portion of the supply chain [largely] for innovator (e.g. non-generic) products, and do not relate to the marketing, sales, or pricing of finished biopharmaceuticals by holders of marketing authorizations (NDA, BLA, etc).

We would be very interested to explore these recommendations in more detail.

Incentives to encourage timely reshoring of commercial manufacturing of API/drug substance and/or finished doses

1. (Financial) Provide refundable tax credits for the [incremental] **cash costs associated with the technology transfer** of products currently produced {solely] outside of the U.S., for such costs incurred within the later of three calendar years following enactment or until final regulatory approvals are granted.
2. (Regulatory) Require the **FDA to systematically utilize existing regulatory flexibilities to reduce the time required to complete transfer and receive regulatory approval** for technology transfers to existing facilities already producing FDA-approved products of a similar nature (e.g. PBOA's Shortage Manufacturing Establishment proposal, below)
3. (Drug Procurement – Drug Sales related) For **single-sourced drugs** purchased directly by the federal government (e.g. VA, Tricare) that are not at least partly domestically sourced, through incentives or mandates **encourage a specified portion of [the cost or volume] of such product be sourced domestically within three years** [and/or sourced from trading partner, if no qualified capacity for such currently exists onshore.] For multi-sourced (e.g. generic, biosimilar) drugs, prioritize vendor selection and leverage favorable pricing and other tactics to encourage **onshore/strong trading partner dual-sourcing of API and finished doses**.

Incentives to encourage rapid scale-up of additional onshore capacity

4. (Financial) Provide **immediate accelerated/full depreciation deductions for tax purposes for any onshore API/drug substance or dose form manufacturing asset additions** (including buildings housing such), potentially including a retroactive adjustment to accelerate depreciation for remaining basis of capacity additions constructed since 2020, the start of the COVID-related public health emergency (given that the domestic industry invested billions in response thereto).
5. (Financial) Given that many CDMOs use debt to finance capacity additions, the 2017-era cap of interest deductibility means that **companies which borrow to invest often cannot realize full deductibility of the borrowing expense related to such capacity, effectively increasing the cost of adding capacity**. By increasing or removing the interest deductibility cap (either removing in total, and/or potentially linking incremental deductibility above current cap to capital expenditure levels), it would effectively decrease the cost of borrowing to support expansions.
6. (Regulatory) Unlike most global regulators, the FDA does not approve a new line or facility until a sponsor filing referencing such line is made. Often this can mean that **capacity that is otherwise ready to produce commercial product must wait for a year or more before receiving initial FDA approval**. There are several options we've proposed to the FDA and Congress to address this, including using (approved) private GMP reviewers, or mutually recognizing selected foreign regulator GMP certificates.
7. (Financial) Prior attempts to increase onshore capacity frequently provided grants or direct government borrowing to build new greenfield facilities, **even when expansion of existing facilities would have been a lower cost, lower risk option**. For areas where National Security interests deem incremental capacity addition onshore is needed, we suggest engaging with both sponsors and CDMOs, making the specific desired capacity specifications clear, and holding a publicly announced RFP process for any companies who wish to engage thereon could do so.

8. (Regulatory) Manufacturing facilities currently have to register with state boards of pharmacy in every state in order to ship clinical trial or commercial products into the state, with widely varying and often complex and resource-costly requirements. Like other areas, we believe that a **nationally harmonized regulatory model for state licensing, or possibly a national model in lieu of such**, would bring material efficiencies to industry.
9. (Financial) In order to reduce the borrowing cost of adding capacity via expansions or new sites, **rather than providing capital, the Federal Government could provide a loan guarantee for all or part of the financing** (similar to FHA/VA mortgage loans). We recommend that investees be required to privately secure [a material portion/least half} of financing required, and then potentially receive private financing for an equivalent or lesser amount from private lenders but with a Federally-based guarantee. This would ensure material private funding is at stake (unlike some of the COVID-era investments), while at the same time reducing a portion of the borrowing costs for the investing manufacturer.
10. (Financial) Apply **a lower tax rate to profits associated with API or finished dose forms produced domestically** that are then sold domestically (or sold for/taken by dispensed to domestic patients, sold to domestic pharmacies/wholesalers, etc.), including any API or finished dose form manufacturer as well as marketers of the product. [Similar to the current FDII tax rate but applied to domestic-for-domestic production]

Incentives to encourage increased domestic pharmaceutical innovation

11. Existing R&D tax credits are available to the sponsor/innovator who will own the intellectual property, but often not to outsourced service providers who often actually perform this work. As an increasing share of this work is going offshore, increasingly to Asia, **extending such tax credits to domestic outsourcing providers who support the research currently generating drug owners their R&D credits would allow domestic outsourcing providers to be more competitive financially**, including with countries where labor costs and/or other subsidies create a economic disadvantage for US-based providers.
    1. Given that a substantial majority of the domestic pharmaceutical development pipeline compounds are owned by smaller public or private/venture backed firms, making this credit refundable would provide additional innovation funding for these smaller firms rather than current carry-forward approach. (Nearly all of these firms in turn use CDMOs)
    2. Closely related to R&D credits, eliminating the capitalization requirement for research expenses (which have been effective since 2022), would remove this disincentive to performing such work for both sponsor/innovators and outsourced service providers.
12. (Regulatory) **FDA's product-centric review approach does not allow contract manufacturers of API/drug substance or finished dose forms to proactively engage with the FDA related to a specific sponsor filing, or across filings with similar needs**, in order to address questions or head off issues that may create regulatory complications and delays in later development or for the product registration review. We have previously asked the FDA (CDER) for a formal communications path for proactive engagement around development stage or commercial product-specific issues, and to be able to communicate proactively about a range of products (since we may be dealing with products from multiple sponsors with similar issues). We suggest creating an FDA-allowed proactive communications pathway specific to CDMO API/drug substance and finished dose manufacturers

Incentives to improve domestic competitiveness internationally and increase biopharmaceutical exports

13. (Financial) Apply **a lower tax rate to profits associated with API or finished dose forms produced domestically that are then exported** (or sold for/taken by dispensed to ex-U.S. patients, sold to ex-U.S. pharmacies/wholesalers, etc.), including any API or finished dose form manufacturer as well as marketers of the product.
    1. This would include extending the current 13% tax rates for Foreign Derived Intangible Income production, but recommends extending that to all exported products regardless of where the intangible assets are held (note that CDMOs produce for many ex-U.S. based pharmaceutical

companies who do not hold their intangibles in the U.S.; such products typically still serve U.S. patients and contribute to the favorable innovator drug export level).

14. (Tariffs) Certain production components, particularly for biological products, are currently substantially sourced from ex-U.S. locations, particularly from certain European countries. **If material tariffs are imposed on these HTS codes, it will make producing such products in the U.S. substantially more expensive than producing them in competing manufacturing sites elsewhere in the world.** This may in turn impact the ~$100B+ biopharmaceutical exports from the U.S. – including important advanced modalities such as cell and gene therapies, where the US current has a manufacturing leadership position. With this submission, we provide a list of such HTS codes recommended for tariff exclusion.
15. (Regulatory) Many global regulators will accept a recent (<2 year past) successful FDA inspection in lieu of performing their own inspection, particularly for API facilities. Given the shifts in FDA inspectional practices, **many domestic API facilities have not had FDA inspections within this time frame, and thus are not able to be referenced in ex-U.S. new drug filings without incurring additional foreign regulator inspections**. We've proposed several options to the FDA, including limited privatization of API facility surveillance inspections, which we believe could remove this competitive disadvantage for U.S.-based API facilities.

HTS Codes Proposed for Exemption From Tariffs

2501.00.00
2835.22.00
2905.59.10
2912.49.26
2914.50.30
2918.99.30
2922.19.96
2922.49.49
2923.90.01
2924.19.11
2924.19.80
2925.29.90
2928.00.50
2930.90.49
2930.90.92
2931.90.90
2932.19.51
2932.99.90
2933.39.41
2933.59.95
2934.99.90
2936.29.50
2937.12.00
2941.90.50
3002.12.00
3002.13.00
3002.14.00
3002.15.00
3002.41.00
3002.49.00
3004.90.10
3004.90.92
3507.10
3507.90.30
3509.90.90
3822.19.80
3824.99.93
3913.90.20
3917.32.50
3917.39
3923.21.95
3926.90.9910
4016.99.15
5681.5
7010.90.05
7010.90.05
8419.89
8421.29.0065
8421.39.01
8421.39.8015
8422.30.9120
8422.40.9181
8479.82.00
8479.89.9090
8479.90
8479.90.85
8481.80
9018.31.00
9018.41.00
9018.50.00
9027.90
9031.49.9000

Shortage Manufacturing Establishments Proposal

The Shortage Manufacturing Establishment proposal can be adapted for companies that are looking to onshore manufacturing of essential medicines.

Much attention has rightfully been focused on the need to ensure that the vital lifesaving and life-sustaining drugs and medical devices do not fall into shortage in the U.S. There are many reasons that drug shortages may develop, including disruptions in the supply of APIs, market failures, capacity issues, and issues identified during inspections at the facilities where finished dosage form (FDF) manufacturing occurs.

Regarding capacity issues and issues identified during inspections, to minimize the likelihood of future shortages, PBOA proposed a solution that would harness the excess capacity of CDMOs, the experts at manufacturing FDF products for their customers.

Currently, if a shortage occurs due to a manufacturing failure, such as a plant being taken "offline" due to inspectional issues, the license holder could engage a new facility, either a CDMO or another facility of its own, to manufacture the product. But this process is time-consuming, and it necessitates that the new facility conducts extensive validation requirements, stability testing, and potentially be subject to a facility inspection by the relevant regulator (typically the FDA). While this process is unfolding, the delivery of needed medications to patients is disrupted.

One solution to this problem would be to create a new designation, "Shortage Manufacturing Establishments (SME)," wherein FDF manufacturing facilities with potential excess capacity, and satisfying certain Federal criteria, could seek a Pre-Shortage Certification to produce certain types of products. If a license holder were to face a potential disruption in their ability to manufacture a product, they would know in advance to whom they could turn: namely, a facility designated as an SME by the FDA.

To expedite availability of supply from reliable entities in the U.S., shortage manufacturing establishments would be eligible for a number of regulatory efficiencies and limited exemptions related to pre-approval inspections, concurrent stability studies, and manufacturing change submissions, so long as they qualified (and were designated by FDA) to be an SME. To be so certified, a facility would have to have an acceptable compliance history, recent experience in manufacturing FDF products, and available capacity.

Nothing about this proposal is mandatory on the part of industry, and in no way should it raise intellectual property concerns. Rather, it creates a bench of well-qualified manufacturing sites pre-designated and ready to work with license holders in the event of a potential shortage.

SME Proposal Highlights

1. Contract Shortage Manufacturing Establishment Program
   a. The Secretary shall establish a program to designate registered manufacturing facilities as contract shortage manufacturing establishments that can assist with the prevention or alleviation of shortages of specified finished dosage forms of drugs (such as tablets, capsules, or injectables).

2. Eligible facilities
   a. A finished dosage form manufacturing facility registered under section 510;
   b. Has manufactured the type of dosage form in question during the last three years;
   c. Classified as NAI or VAI during—
      i. Most recent surveillance inspection during a period when the facility was manufacturing the type of dosage form in question; and
      ii. Most recent surveillance inspection, regardless of whether that particular type of dosage form was being manufactured at the time of the inspection.
   d. Qualified equipment, processes, and protocols in place pursuant to GMP regs

3. Program framework.
   a. Not later than 1 year after the date of enactment, the Secretary shall establish a framework for implementation of the program under this section.

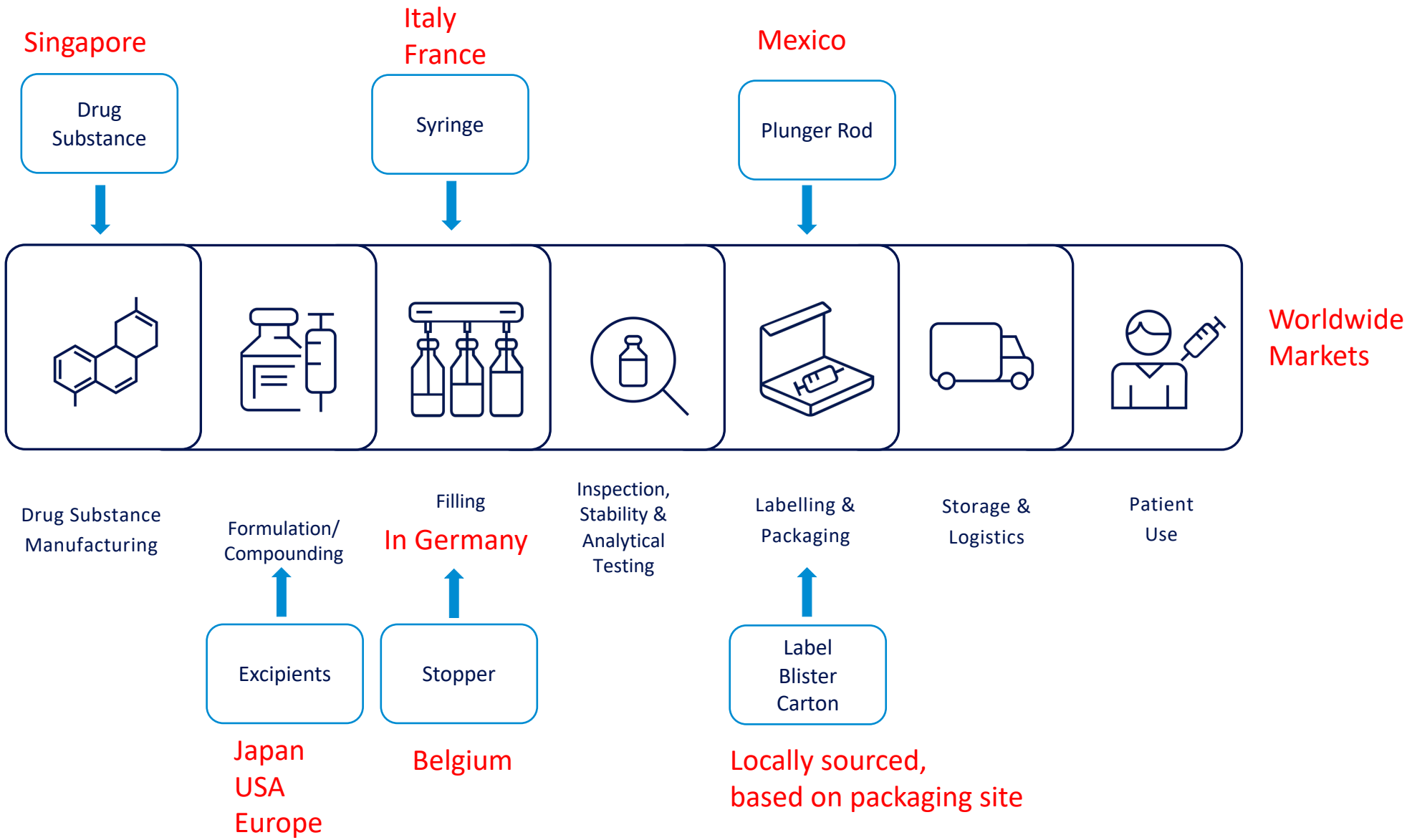
b. The Secretary shall identify requirements under section 506A related to manufacturing changes that may be waived based on such designation to expedite the prevention and alleviation of drug shortages involving certain types of dosage forms.

4. Process for approval and maintenance of designation—
   a. Application for designation of specific dosage forms;
   b. Timeline for decision, not to exceed 90 days after application;
   c. Process for appeal

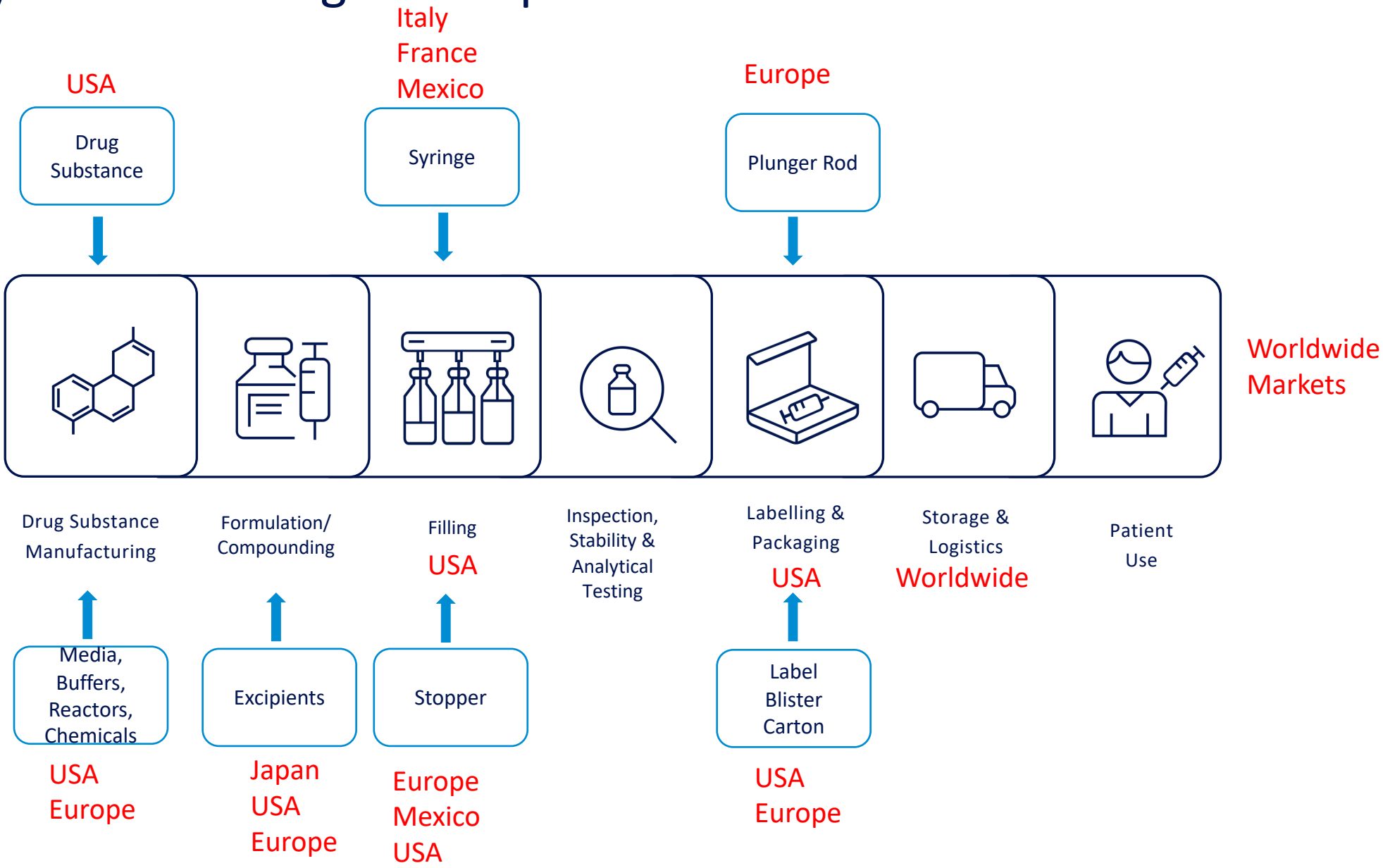
5. Consultation.
   a. Prior to developing the framework, the Secretary shall consult with regulated industry, contract manufacturing organizations, holders of applications under section 505 and licenses under 351, and hospitals.

6. Implementation
   a. Not later than 18 months after the date of enactment and in accordance with the framework established under 3a, implement the program and issue or revise draft or final guidance as necessary.

Global Supply Chains: Example for a Biologic Drug



Global Supply Chains: Biologic Example 2



Global Supply Chains: Small Molecule Example 1