Meet the demands of supply in emerging markets

The challenges of global sourcing for clinical trials have never been greater, particularly in emerging regions. Clinical Trials Insight talks to Khaled El-Gendy, associate director and head of the Comparator Sourcing Center of Excellence at Fisher Clinical Services, about the company’s strategy for sourcing supplies in emerging markets.

How have emerging markets contributed to the complexities of clinical trial supply sourcing?

Khaled El-Gendy: In the past decade, biopharmaceutical companies have increasingly turned to emerging markets as a way to reduce clinical trial costs and timelines. The volume of clinical trials in emerging markets has reached record levels. This is driving the demand for comparator drugs, and the pressure to source sufficient quantities within tight time frames and budget constraints.

In late 2015, for example, more than 202,000 trials were taking place in 190 countries, a number that’s been climbing steadily, according to clinicaltrials.gov, the registry of clinical trials. Today, clinical trials frequently take place in 30 or more countries, many of them emerging. Setting aside the number of countries, and obvious language and cultural barriers, there are regulatory, supply and logistical obstacles that magnify the challenge of sourcing comparators in emerging markets.

As the number of trials climbs, many emerging markets are creating or evolving their regulatory infrastructures. As a result, supply chain professionals contend with a mixed bag of unclear regulations, regulations that constantly change and even regulations that are scheduled to change but do not.

In addition, some suppliers in emerging markets do not adhere to European and North American quality standards and requirements. Due either to a lack of understanding or concern, some suppliers don’t adhere consistently to temperature controls for cold chain products during storage and transportation. This is a particular problem in tropical climates.

Maintaining the integrity of the supply chain is another issue of concern. Drug counterfeiting is escalating worldwide, affecting developed and developing countries. China and India, two top-ranked countries for clinical trials, have been identified as sources of an increasing number of counterfeit drugs. WHO estimates that up to 30% of the drugs sold in parts of Asia, Africa and Latin America are counterfeit.

Product documentation, such as certificates of analysis, can be difficult to obtain from suppliers in these countries or is available only in the local language. Such documentation is necessary for import/export purposes; should a product need to be exported for repackaging and reimported to a country for a clinical trial. This brings us to logistical concerns around choosing couriers based upon performance: some courier companies in emerging markets present excellent on-paper qualifications but prove unreliable in practice.

What are the advantages and implications of sourcing non-IMP products in emerging markets?

Sourcing non-IMP products – that is, rescue, background or co-medication – in emerging markets can provide significant value. For one thing, sourcing non-IMPs locally eliminates the need to repack it. While it may be surprising, sometimes sufficient non-IMPs are available only in emerging regions. A good example is that of rescue medication, which must bear labels in the local language.

Another reason for sourcing locally is when a manufacturer prevents or delays sourcing of its product for a competitive trial. In such cases, supply chain managers may be unable to source comparators on the open market of developed countries.

Also, non-modified IMPs sourced in Asian and Latin American emerging markets are often less expensive than those sourced in the EU or North America. Thanks to the cost-differential, local sourcing of IMPs is preferred for open-label studies. Oncology trials are a good example; 80–90% are open-label trials, and oncology drugs are less expensive to source in emerging regions than in the EU or North America.

While most comparators sourced in emerging markets are used for trials in those countries, at times, it is cost-effective to source comparators in one emerging market for use in another emerging or non-emerging market. Under such circumstances, there is no substitute for profound knowledge of local regulatory requirements.

The ability to source non-IMPs in an emerging region and label them in a single language provides ease of sourcing and eliminates the need for country-specific packs. For example, packs labelled in Arabic are often used throughout the Middle East, and Spanish-language packs are used across Latin America.
Sometimes, the issue of sourcing within a country is not a matter of choice. Import restrictions in some countries, among them Thailand, Taiwan and Cambodia, make it necessary to source comparators locally.

Finally, sourcing comparators through the open local market can eliminate the time, cost and effort necessary to import the product, not to mention the logistical burden. Research indicates that quality is the greatest concern of clinical supply teams when sourcing comparator drugs.

**How does your company secure supply chain assurance in complex global sourcing projects?**

Direct sourcing from the manufacturer is almost always the best option because it establishes the shortest, most transparent supply chain. Sometimes this isn’t feasible or desirable — when the manufacturer isn’t present in those countries, has no stock available or the required quantities of comparator are small, for example. In many cases, a sponsor may also not want a competitor to know about plans for a competitive trial.

In these cases, a rigorous qualification of wholesalers and distributors is essential. The qualification process should include risk assessments of the supplier and the country of sourcing. Supplier criteria include reputation and referrals, licences, capacity, pricing, benefits and financial stability.

The country of sourcing is key because some markets are safer than others. Country criteria include whether the regulatory authority requires adherence to GMP, GDP and CCP standards, legal provisions on marketing authorisation, regulatory inspection of manufacturers and distributors, import control and licensing, and sanctions for violations of codes of conduct. Another element is the frequency with which counterfeit drugs have been documented in the country.

**What are the special challenges of supplying countries such as China, Russia and Ukraine?**

China, Russia and Ukraine have ranked among leading choices for clinical trials for a decade. Even so, they were named among the markets as the “most challenging from a clinical trial supply perspective” in a 2014 Fisher Clinical Services survey of clinical trial professionals.

In China, the biggest hurdle to overcome is bureaucracy, a complex web of government policies and regulations that constantly change. It can take up to 24 months for the Chinese Food and Drug Administration to approve a clinical trial application, a delay that impacts supply plans. As a result, conducting studies there requires long lead times and patience.

Russia and Ukraine recently eased respective regulations, making it easier and less expensive to conduct clinical trials. Russia reduced duty on clinical trial drugs in late 2014 but still requires an umbrella licence before clinical supplies may enter the country. The application process to obtain the umbrella licence is complex.

In late 2014, Ukraine also reduced its import tax but went further by eliminating the need for an umbrella licence before a study can begin as well as the need for an import permit for every drug shipment. Now, drug importation can begin once the health ministry approves the trial and a distributor receives Importer of Record (IoR) approval.

Russia and Ukraine share challenges related to size, infrastructure and weather. A local facility/depot that can act as IoR and store supplies under temperature-controlled conditions is key to ensuring timely supply shipments. Supply chain interruptions can be minimised during extreme weather conditions, as our Moscow facility did during a huge December 2014 snowstorm. Thanks to the tireless work of depot staff and couriers, all supply deliveries reached their destinations with no major delays.

**What should sponsors keep in mind with respect to sourcing comparator drugs for trials in emerging regions?**

The goal is managing the supply chain from day one through to the conclusion of the trial. With that in mind, sponsors should take a strategic approach to comparator sourcing. It is important to consider every factor in order to create a customised comparator sourcing strategy that maximises options and minimises risk.

To provide maximum flexibility, it is best to begin planning a comparator sourcing strategy when a protocol is in development. Start by learning about the specific challenges and risks presented in targeted emerging markets, and then identify ways to mitigate these risks.

The best way to guarantee reliable quality and quantity is by creating the shortest supply chain possible. Having a supplier source directly from the manufacturer reduces costs and the risk of counterfeit product.

Another way to avoid pitfalls is by working only with qualified suppliers and logistics providers. Minimise risk by vetting suppliers using a rigorous qualification process.

It is also critical to choose the right strategic business partner, one with a fully owned global network, complete and integrated logistical services, and experience in emerging regions. A fully integrated approach to supply chain management means sourcing, blinding, packaging, labelling and distribution, and a proven focus on quality and compliance. A knowledgeable and experienced partner can make time and cost-saving recommendations about sourcing comparators.

Finally, it is important to keep in mind that when it comes to something as complex and with as many variables as a clinical trial, there is no one-size-fits-all sourcing solution; every sourcing project requires a tailor-made strategy to deliver the best outcome.

**Further information**

Fisher Clinical Services
www.fisherclinicalservices.com

**Clinical Trials Insight** | www.worldpharmaceuticals.net