Generic Drug Approval Process in China

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The domestic prescription drug market in China is growing rapidly. China is expected to become the world’s third largest prescription drug market in 2011, and the Chinese pharmaceutical market may double by 2013. This growth is likely to continue for some time considering that China accounts for 20 percent of the world’s population, but only 1.5 percent of the global drug market. And because a large portion of the Chinese population is not covered by basic health insurance, low cost generic drugs will account for the majority of the growth of China’s prescription drug market. Chinese manufacturers are also known for their ability to cost-effectively follow innovations developed in the West. It is thus not surprising that China currently has about 3,500 drug companies, most focused on generic drug manufacturing. In 2010, the State Food and Drug Administration of the People’s Republic of China (SFDA) approved 886 domestic drug registration applications, 651 of which were for generic drugs (73 percent).

This article provides an overview of the regulatory framework for SFDA’s generic drug approval process.

As an initial matter, it is important to understand the basic differences between the prescription drug regulatory schemes in China and the United States. In the United States,
Bioavailability study with pharmacokinetic parameters.

Clinical Trials
A generic drug application, or so-called “abbreviated application,” may omit preclinical and clinical test data on the basis that the drug is already on the market and its effectiveness and safety understood. The key aspects of the examination and approval process focus on the quality of the manufacturing process and conformity with the existing national drug standard. In certain circumstances, clinical trials are required for safety reasons. According to the Annex to the Amended Regulation, for generic drugs based on traditional Chinese medicine (TCM), or natural drug injections, clinical trials on no less than 100 pairs of cases are required. For generic chemical drugs where the quality is controlled by defined processes and standards, clinical trials on 18-24 cases are typically required. For biosimilars, Annex III to the Amended Regulation, which applies specifically to the registration of biological drugs, provides that biosimilars applications are subject to full-phase III clinical trials.

Application Procedure
Generic drug applications must be filed by the drug manufacturer in the provincial FDA (PFDA) where the applicant is located. The PFDA serves as the receiving office for the generic application and determines whether the application dossier is in proper order. If the requirements are met, the PFDA provides notification of acceptance of the drug registration application. If the requirements are not met, the applicant is provided with an explanation of the reasons for rejection, and the opportunity to reapply. Within five days of acceptance of the application, the PFDA will conduct an on-site inspection of the production site, as well as the original drug research data, and take samples of three consecutive batches to send to the Drug Control Institute for inspection. The sample products are required to be manufactured in a facility with Good Manufacturing Practice (GMP) certification.

After completing examination of the application dossier, the PFDA will submit the dossier along with its examination recommendation, verification report and results of its inspection of the production site to the SFDA Center for Drug Evaluation (CDE) within 30 days. CDE will organize pharmaceutical, medical and other technical staff to examine the verification recommendation and the application dossier, and may request that the applicant provide supplemental information if necessary. At the same time, the Drug Control Institute tests the sample products and provides its sample test report to CDE, the PFDA and the applicant. CDE prepares a general examination recommendation based on the technical examination recommendation, production site inspection information and sample test report, and then submits to SFDA along with related data. SFDA then makes its approval decision based on the general recommendation and issues a Drug Approval Number (if no clinical trials are needed), or a Clinical Trial Approval (if clinical trials are needed). Upon completion of clinical trials, the applicant must then submit the clinical trials data to SFDA for issuance of a Drug Approval Number. For drugs that do not meet safety requirements, the Amended Regulation grants SFDA authority to suspend acceptance or approval of the generic drug application. ▲
Generic Application Approval Flow Chart & Timeline

1. Applicant completes Drug Registration Form; submits production application dossier and application for inspection of production site to the PFDA.

2. PFDA conducts formal examination; if accepted, within five days PFDA conducts on-site inspection of production site and drug research data, and takes sample drugs from three consecutive batches.

3. After completing the examination of the application dossier, PFDA submits application dossier, its examination recommendation, verification report and conclusions from its inspection of production site to CDE. (30 days)

4. CDE arranges for pharmaceutical, medical and other technical staff to examine the verification recommendation and the application dossier (160 days), and may request that applicant provide supplemental information if necessary.

5. CDE concludes a general examination recommendation based on the technical examination recommendation, inspection report of production site, and sample test report, and submits to SFDA along with related data.

6. SFDA makes approval decision based on the general recommendation.

7. Issue Drug Approval Number (within 10 days).

8. Clinical Trial Approval (within 10 days).

9. Applicant submits clinical trial report to CDE.

10. CDE conducts technical examination of clinical trial report.

11. SFDA makes approval decision based on the technical examination recommendation (30 days).

12. Issue Drug Approval Number (within 10 days).

13. Notification of approval opinion (within 10 days).

14. The Drug Control Institute tests the sample product and sends the sample test report to CDE, PFDA and applicant. (30 days)