
Supplementary information

Approvals by the China NMPA in 2023

In the format provided by the authors

Supplementary Box 1 | Current drug registration classification in China*

Chemical drugs		
Class 1	<ul style="list-style-type: none"> ① not yet been marketed in China or overseas ② with clearly structured new molecular entities (NMEs), pharmacological effects, and clinical values 	
Class 2	<ul style="list-style-type: none"> ① not yet been marketed in China or overseas ② with known active ingredients and significant clinical advantages 	Class 2.1: Optical isomers, salts, esters, or other simple derivatives
		Class 2.2: New dosage forms, new formulation processes, or new administration routes
		Class 2.3: New compound preparations
		Class 2.4: New indications
Class 3	<ul style="list-style-type: none"> ① manufactured by domestic applicants by imitating the original drugs that have been marketed overseas but not yet in China ② consistent with the reference listed drugs in quality and efficacy 	
Class 4	<ul style="list-style-type: none"> ① manufactured by domestic applicants by imitating the original drugs that have been marketed in China ② consistent with the reference listed drugs in quality and efficacy 	
Class 5	<ul style="list-style-type: none"> ① already been marketed overseas ② under application for being marketed in China 	Class 5.1: Innovative drugs and modified drugs with significant clinical advantages
		Class 5.2: Generic drugs
Therapeutic biological products		
Class 1	not yet been marketed in China or overseas	
Class 2	<ul style="list-style-type: none"> ① based on biologics that have been approved in China or overseas ② with improved safety, efficacy, quality control, and significant clinical advantages 	Class 2.1: New dosage forms, or new administration routes
		Class 2.2: New indications, or new target groups
		Class 2.3: New compound products
		Class 2.4: Major technical improvements

Class 3	already been marketed in China or overseas	Class 3.1: manufactured and marketed overseas, and applying for marketing authorization in China
		Class 3.2: marketed overseas, and applying for manufacturing and marketing authorizations in China
		Class 3.3: Biosimilars
		Class 3.4: Other biological products
Traditional Chinese medicines (TCMs)		
Class 1	① not been included in the national drug standards, drug registration specifications and the Catalogue of Ancient Classic and Famous Prescriptions ② not yet been marketed in China or overseas	Class 1.1: Combination of multiple decoction pieces or extracts
		Class 1.2: Extracts and preparations from single plants, animals, minerals and other substances
		Class 1.3: New Chinese medicinal materials and their preparations
Class 2	① not yet been marketed in China or overseas ② with significant clinical advantages	Class 2.1: New administration routes
		Class 2.2: New dosage forms
		Class 2.3: New indications
		Class 2.4: New production processes or changed excipients
Class 3	① compound preparations of TCMs originated from classic recipes ② complying with the provisions of the Law of the People's Republic of China on Traditional Chinese Medicine ③ with definite curative effects and obvious clinical advantages	
Class 4	① with identical name and identical recipes, dosage form, indication, usage and daily dosage as those of the listed Chinese traditional medicine ② no less safe, effective and controllable in quality	

*As defined by the Provisions for Drug Registration 2020.

Supplementary Box 2 | Criteria of the priority review and approval procedure by NMPA

Priority Review and Approval Procedure	
①	Drugs with urgent clinical needs in shortage, innovative drugs and modified new drugs for the prevention and treatment of major infectious diseases or rare diseases.
②	New products, dosage forms and strengths of pediatric drugs complying with the physiological characteristics of children.
③	Vaccines urgently needed for disease prevention and control, and innovative vaccines.
④	Drugs included into the breakthrough therapy drug procedure.
⑤	Drugs included into the conditional approval procedure.
⑥	Other circumstances of priority review and approval specified by the NMPA.