Adapting the New Regulations to Drive Faster Market Access

9th Clinical Leader Summit, Nov 1, 2016, Shanghai

- Pre-requisite for a foreign manufacturer to access into China market
- Different Models to Run Business
- > Approaches to drive faster product market approval
- > Considerations in CFDA application for product registration

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Pre-requisite for a foreign manufacturer to Market Medical Device in China

What a foreign manufacturer need to have in order to sell your product to users in China:

- Agent for pre-market submission
- Product registered with CFDA;
- Importer(s) or China Branch office or WFOE
- Distributor(s) or dealers(s)
- Agent for post-market regulatory compliance

Pre-Requisite: Requirement and Roles

A foreign manufacturer needs to fulfill the requirements and roles by itself or some one it assigns

| | Who & What | Requirement | Roles | Remark |
|---|--|--|--|--|
| 1 | Agent to submit for CFDA registration | Legal entity registered in China | Submitting on behalf for product registration | The roles and responsibility |
| 2 | Medical Devices product | Approved in COO* such as US FDA 510K or PMA CFDA Registration | As a pre-requisite For safety and efficacy | can be taken cared by one or more legal entities in |
| 3 | Importer or China Branch | Import license | Importing product to China | China as long as the |
| 4 | Dealer/distributor | Medical Device Distribution License | Selling product to users | qualification is satisfied. |
| 5 | Agent for post- market regulatory compliance | Legal entity registered in China | Taking legal or regulatory responsibility jointly for product sold | |

Note* COO: Country of Origin may be the country where the legal manufacturer or physical production factory is located

Pre-requisite under the different product types

Foreign manufacturer/supplier may not necessary need to assign an importer or dealer if a large, capital equipment is sold directly to client in China, as client may assign an importer

| | Who & What | Qualifications | Small size, disposable | Large, capital equipment | |
|---|--|---|---------------------------|-----------------------------------|--|
| 1 | Agent to submit for CFDA registration | Legal entity in China | Mandatory | Mandatory | The roles and responsibility can be taken |
| 2 | Medical Devices product | Approved in COO such as US FDA 510K or PMA CFDA Registration | Mandatory | Mandatory | cared by one or more legal entities in |
| 3 | Importer or China Branch | Import license | Yes, usually | Not necessary if selling directly | China as long as the |
| 4 | Dealer/distributor | Medical Device Distribution License | Yes, usually | Not necessary if selling directly | qualification is satisfied. |
| 5 | Agent for post- market regulatory compliance | Legal entity in China | Mandatory | Mandatory | |

Comparison of Pre-Requisite with a manufacturer in China BioHan Consulting

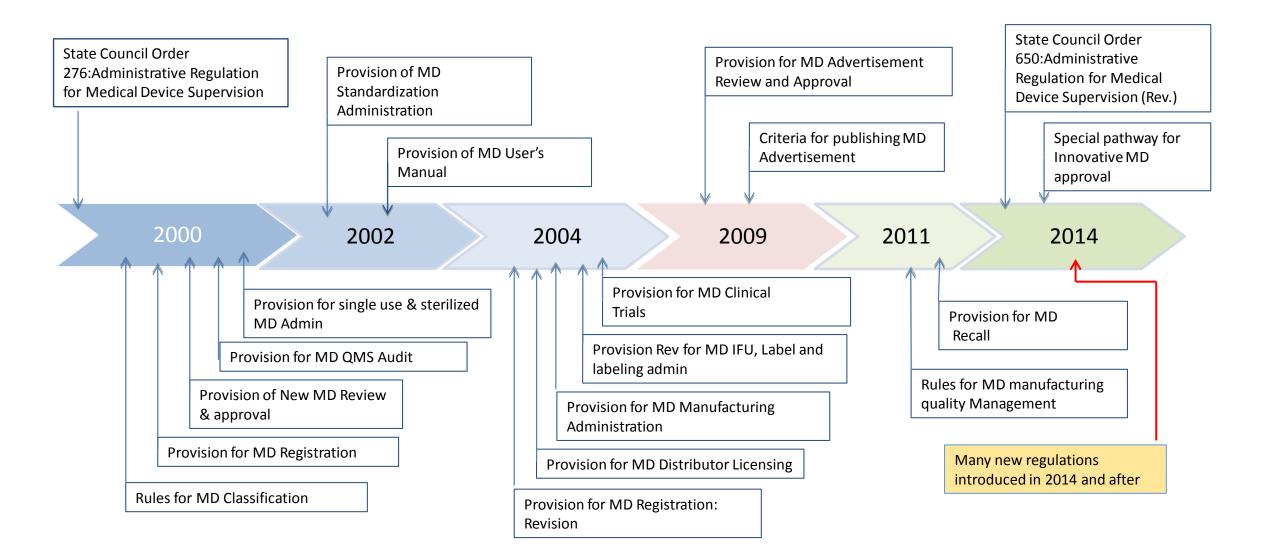
Domestic manufacturer needs neither to get market approval by a foreign country, and nor an importer for importation. But the same mandatory requirements for others, in particularly CFDA registration for product

| | Who & What | Foreign | Domestic | | |
|------------|--|---|--|---|--|
| 1 | Agent for pre- market approval | Legal entity in China | Yes | The roles and responsibility can be taken | |
| 2 | Medical Devices product | Approved in COO such as US FDA 510K or PMA CFDA Registered | No need to have market approved already by the Country Of Origin | can be taken cared by one or more legal entities in China as long as the qualification is satisfied. | |
| 3 | Importer or China Branch | Import license | No need to have an importer | | |
| 4 | Dealer/distributor | Medical Device Distribution License | Yes | | |
| 5 | Agent for post- market regulatory compliance | Legal entity in China | Yes | | |
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- What is new in current regulations?
 - Regulations enforced in 2016
 - What implication and impact?
- > Overview of Registrations
- > How to deal with the new regulations for faster pre-market approval
 - Special Process for Innovative Medical Devices;
 - Preferential Approval for Priority Device;
 - Shifting manufacturing of imported device to China;
 - Competent RA team and CRO.



State Council: Regulation for MD Supervision and Administration, June 2014

China Food and Drug **Administration**

| Pre-Market | | |
|-------------|---|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | / | |
| Post-Market | | |

Provision for AE Report and Recall, 2011 Innovative product Registration, 2014

Provision for MD Registration, 2014

Product IFU, Labeling, 2014

Manufacturing Quality, 2014

Distribution/Sales, 2014

Guidance for MD Clinical Evaluation, 2015

Quality Administration of MD in Clinical Use, 2016

Provision for Clinical Trials Quality Control (GCP), 2016

MD Classification and Nomenclature Rules, 2016

2nd Batch of MD Exempted from Clinical Trial, 2016

Preferential Approval Process for Priority MD, 2016

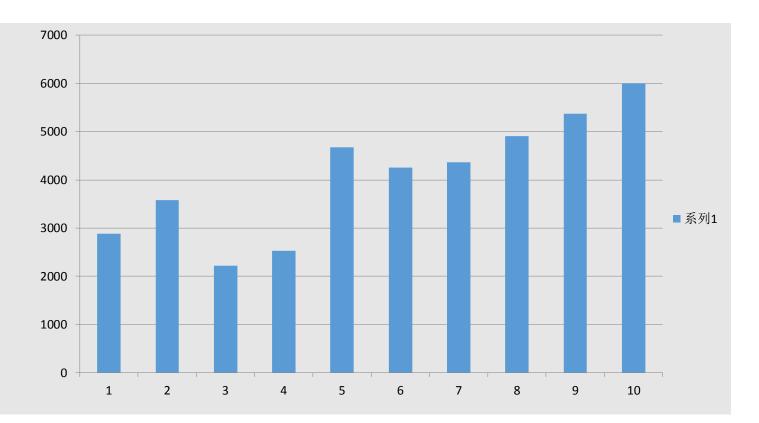
A complete set of regulatory system has been developed

- More strict control on high risk devices;
- Addressing clinical evaluations;
- Requiring clinical trial for imported device, the same as for domestic device;
- Introducing quality controls on device in clinical use;
- Preferential policies to devices with innovation & better clinical benefit

Overview of CFDA Registrations

CFDA Registration of Import Medical Devices (2004-2013)

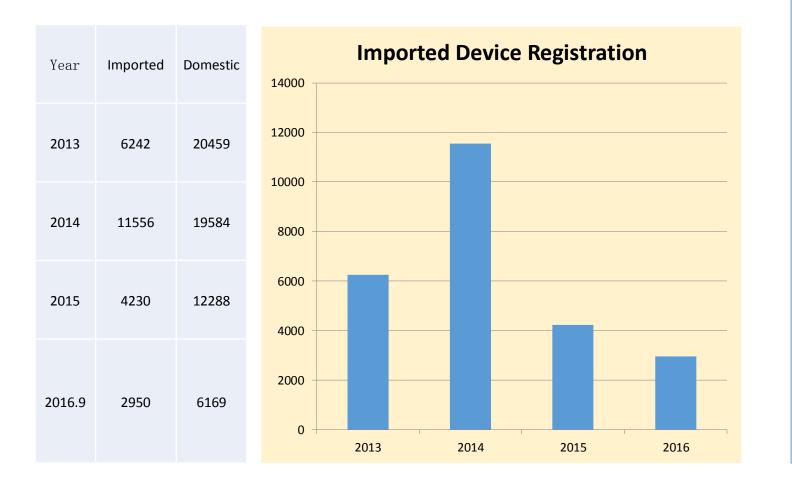
| | Year | No. | |
|----|-------------|--------|--|
| 1 | 2004 | 2883 | |
| 2 | 2 2005 3578 | | |
| 3 | 2006 2226 | | |
| 4 | 2007 | 7 2536 | |
| 5 | 2008 | 4671 | |
| 6 | 2009 | 4257 | |
| 7 | 2010 4362 | | |
| 8 | 2011 4910 | | |
| 9 | 9 2012 5370 | | |
| 10 | 2013 | 5999 | |



• The number of import registration increased very steadily in 5 years

• There was a drop in 2006-07, but rebounded in 2008/09, the reason is because of CFDA political leader's turmoil

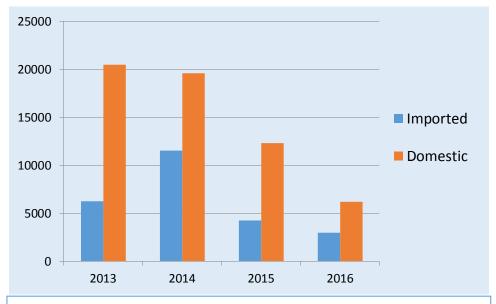
Impact of New Regulations on Registration in Recent Years



- Significant increase of registration in 2014 before the new regulations introduced for enforcement in 2015;
- Sharp decrease in registration number in 2015 due to the complication of new requirements, clinical trials, delay, higher costs, also exclusion of class I;
- It seems to recover in 2016 and future as expansion of clinical trial exemption

Comparisons of Registration with Domestic Devices

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- Different from imported registration, no increase of domestic device registration in 2014 because almost no impact from the new regulation;
- Decrease in 2015 mainly because of complication from new regulatory requirements;
- Impact of the new regulations is significant for both imported and domestic.

Import Registration from Top 5 Origins in 2015



- 31% of all import registration from USA;
- 18% from Germany;
- 10% from Japan.

Adapting the New Regulations to Drive Faster Market Access

- > What is New in Regulations?
 - Regulations enforced in 2016
 - What implication and impact?
- > Overview of products registered
- How to deal with the new regulations for faster pre-market approval

When one door shuts, another opens:

- Special Process for Innovative Medical Devices;
- Preferential Approval for Priority Device;
- Shifting manufacturing of imported device to China;
- Higher competency needed for RA team and CRO.

Special Process for Innovative Medical Device Review and Approval

The manufacturer/applicant that meets all of the following conditions can apply for eligibility of enjoying special approval process:

(1) The applicant,

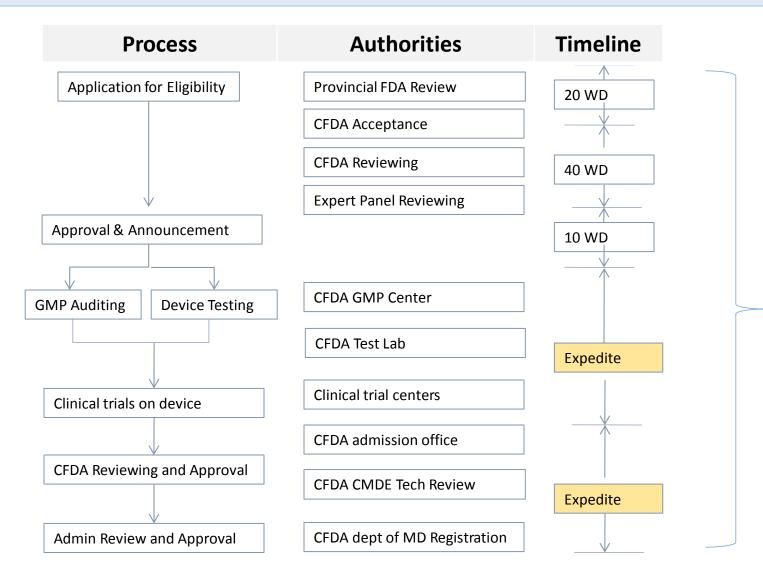
a) through technological innovations which it leads, holds by law in China, **indigenous intellectual properties of core technologies** of the product, or

b) through the transferring in accordance with the Chinese law to **obtain patents for inventions** or their right to use in China, or

c) the application to the authorities of intellectual properties (Inventive Patent) of China for the ownership or right of the patent for invention has been **published (announced**) by the patent authorities of China.

- (2) The main working principle/function mechanism of the product must be that it is **original (the newest and leading) within the country (China).** The product properties or safety must have **fundamental improvement** compared with similar products. The technology must be **internationally advanced**, with significant **clinical application values**.
- (3) The applicant must have finished preliminary studies of the product, and **produced basically finalized product** (prototype). The research process is real and controllable, and the research data is complete and traceable.

CFDA Special Process for Innovative Product

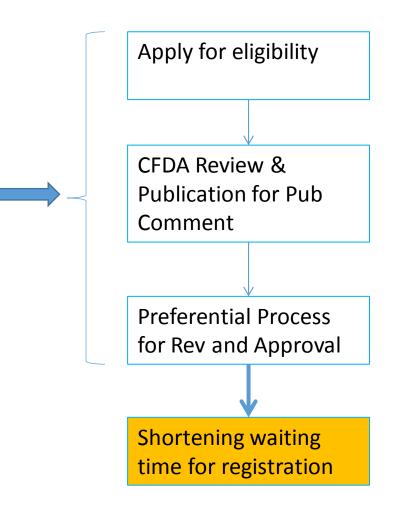




- Designated reviewer
- Instruction for RA & Tech requirements
- Faster processing without waiting time

Preferential Review and Approval Process

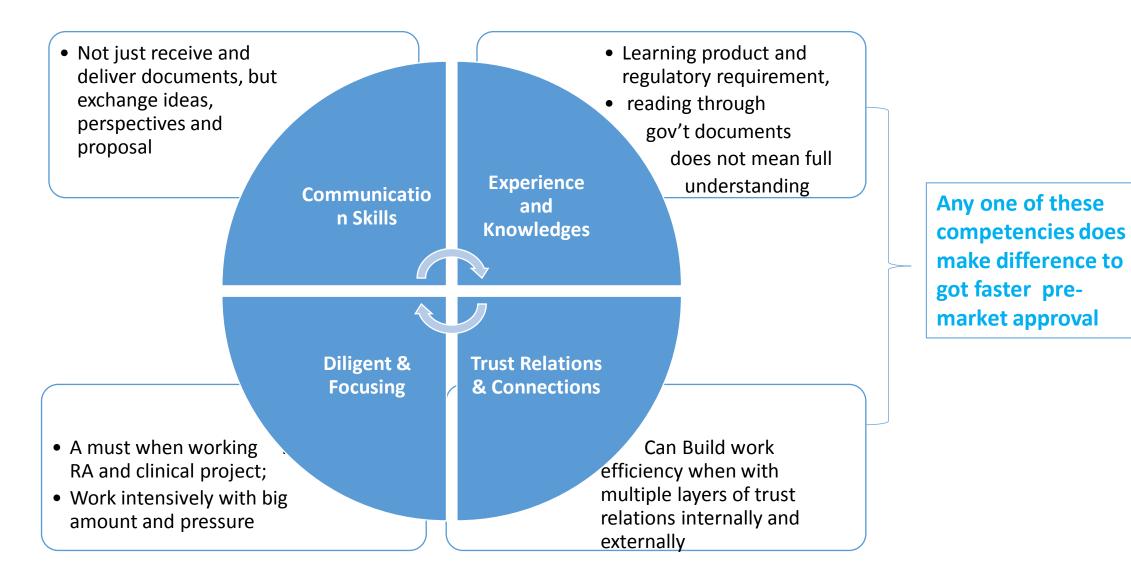
- ① Diagnosis or treatment of rare diseases, and has obvious clinical advantages;
- 2 Diagnosis or treatment of malignant tumors, and has obvious clinical advantages;
- ③ Diagnosis or treatment of elderly-specific and multiple diseases, and no effective diagnosis or treatment;
- ④ Dedicated to children, and has obvious clinical advantages;
- 5 Clinical **urgently needed**, and in China there is no same species of products approved for market.



| Aspects | Imported Product, e.g. | Developed in China, e.g. | Assembled/manufactured in China for already registered import device |
|--|--|---|--|
| Requirements in general | Almost the same, but QMS audit only if necessary | Quality system audit; | Same as developed in China |
| Time to market (if no clinical trials required) | 18 +/-3 months: -wait for US FDA approval before submission; - need to test unit imported | 15 +/-3 month: - can start earlier; - no need to wait for pre-approval from country of origin | Same as developed in China |
| Time to market (if Clinical trials required) | 30 +/-3 month (12 month for clinical trials) | 27 +/-3 months (12 months for clinical trials) | No need for clinical trial in China, but evaluation on existing data |
| Benefit from special approval of Innovative Device if eligible | Some benefit: - Need waiting for pre-approval from COO; - Need IP registration in China; | More benefit: - Earlier entering into CFDA review process from development. | Same as left |
| Establishment of manufacture | No need in China | Manufacturing license: - Wholly Foreign owned - Joint Venture | Manufacturing license: -Wholly Foreign owned - Joint Venture |
| Cost for registration | Translation fee; CFDA user fee doubled vs local | Less user fee | Less user fee |

Higher Competency to Work in RA and Clinical Project

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Thanks for Listening !

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