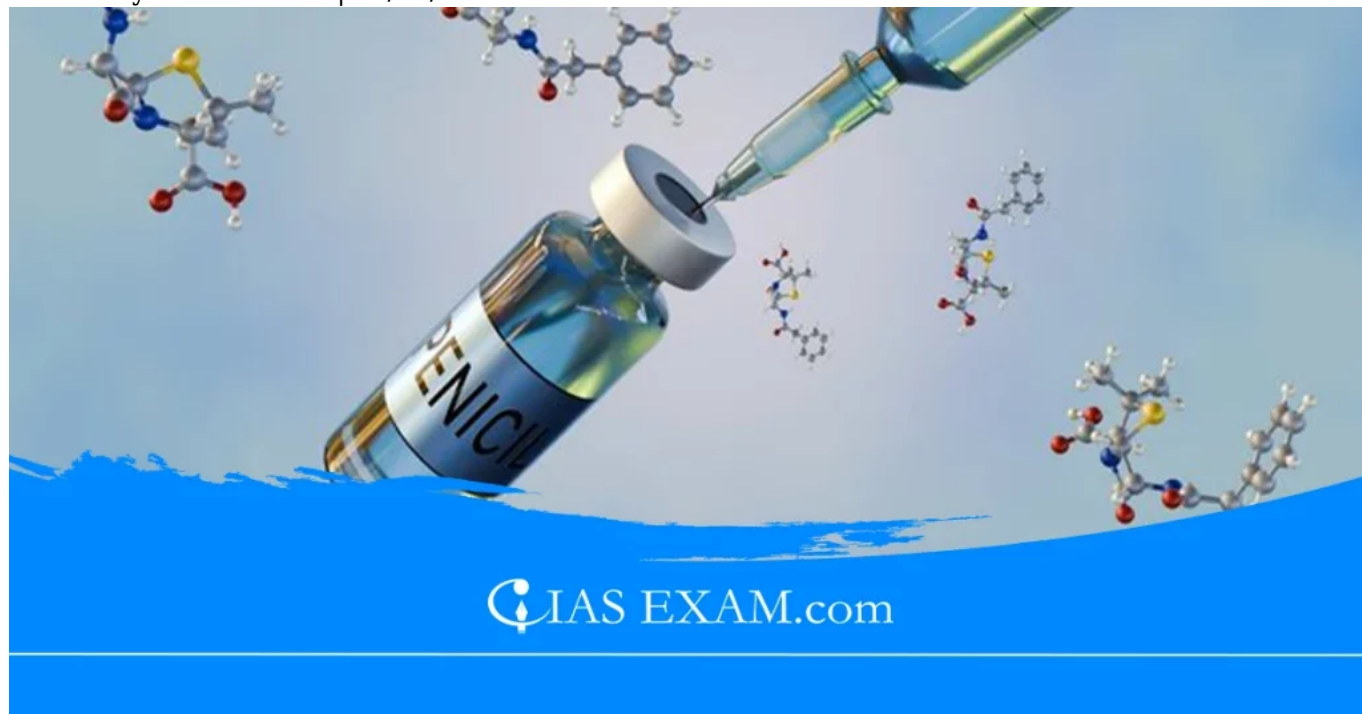


India resumes manufacturing of Penicillin G

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Context

India will start manufacturing the widely used antibiotic Penicillin G, which had been discontinued three decades ago, by mid-2024.

Penicillin G

- Penicillin G is a common antibiotic ingredient used in the production of various antibiotics.
- It is approved by the FDA for treating serious bacterial infections like pneumonia, meningitis, and syphilis.
- Penicillin G is a natural antibiotic and, therefore, it is applied via injection because, as a method of application, it does not irritate the tissue and it is also better tolerated. It is applied inside, only in very exceptional cases. Used preventatively.

Reason behind penicillin manufacturing stop in India

- In the 1990s, several Indian companies, including Torrent Pharma, produced Penicillin G.
- Most of the Indian manufacturers have completely phased down production of this antibiotic, while cheaply subsidised Chinese products continue to flow in. This trend was seen in the larger perspective of liberalisation of the Indian economy, in which the relaxed customs rules brought about the change of importing cheaper products. The

Drug Prices Control Order further restricted the prices of the essential medicines and offered more incentives to companies to opt for cheaper imported alternatives.

Importance of Resumption

The decision to resume manufacturing Penicillin G is significant for several reasons:

- **Medical Necessity:** Penicillin G remains an essential antibiotic in the treatment of various bacterial infections. Its availability is crucial for public health, especially in combating diseases where antibiotic resistance is a growing concern.
- **Self-reliance:** By resuming the manufacturing of Penicillin G, India plans to avoid overdependence on imports of the critical pharma product to meet its domestic demand. This resonates with the government's vision towards self-reliance and enhancing domestic manufacturing, more so on those areas that are pivotal towards public health.
- **Economic Implications:** Initiation for the manufacture of Penicillin G will have very few positive economic implications, like employment opportunities created and revenues generated. It may further strengthen the pharmaceutical exports from India.
- **Impact on health services:** If there is one thing that the availability of Penicillin G brings, it has to be that it is definitely a game-changer in the way health services have been offered in India. In simple terms, it makes it certain that the healthcare service providers can access some of the very critical antibiotics with which to offer treatment for the cases of infections. This can contribute, in return, to improved health outcomes for patients across the country.
- **Regulatory Approval and Quality Assurance:** Commencement of Penicillin G manufacture will require regulatory approval and conformity with quality standards. It should, right from production, follow very strict guidelines to assure safety, efficacy, and quality of the antibiotic.

What caused the delay in restarting?

- The decline in API production in India did not receive much attention until the pandemic disrupted supply chains. This prompted the government to launch the PLI scheme to support domestic manufacturing.
- Another point is the manufacturing of APIs, particularly fermented APIs like Penicillin G, which is also costly and requires huge initial investment. China is very established in terms of the presence as a supplier; thus, it will be hard to compete with it on price without investment in bigger facilities.

Conclusion

It is in this background that India deciding to restart the manufacturing of Penicillin G augurs well and is a very strategic move for strengthening and reinforcing the pharmaceutical industry, self-reliance, efficiency in meeting the demand for healthcare, among others. The decision underscores commitment to assure the availability of essential medicines to secure public health, besides, of course, bespeaking faith in India's furthering of its pharmaceutical sector.

UPSC Prelims Practice Questions

Q. Consider the following statements about Penicillin G:

1. Penicillin G, also known as Benzylpenicillin, is a natural antibiotic primarily used in the treatment of bacterial infections like pneumonia and meningitis.
2. The production of Penicillin G was discontinued in India in the 1990s due to competition from cheaper, subsidised imports from China.
3. Penicillin G is usually administered orally due to its stability in the gastrointestinal tract.

Which of the statements given above is/are correct?

- a. 1 only b. 1 and 2 only
b. 2 and 3 only d. 1, 2, and 3

Ans - "b"