

Pharma evolution journey



Pharma evolution journey



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- **Personalised medicine**
- **mRNA vaccine**



- **Personalised medicine**

is a medical model that emphasises the importance of tailoring treatment to each individual patient according to their needs and circumstances



WHY WE NEED IT?

- **Personalised medicine**

each person's health is determined by a unique set of factors, including their individual genetic make-up, their lifestyle, and their environment. This means that, as we are all different, a treatment that works on one patient may not work for another with different circumstances



- **Personalised medicine**
- **mRNA vaccine**

What is it?

- **mRNA vaccine**

A new type of vaccines based on genetic material reprogrammed to produce antigens from pathogens (such as viral protein mutations or cancer antigens), which then stimulate an adaptive immune response against the pathogen. These vaccines are characterized by rapid production, low cost, and the ability to stimulate both cellular and humoral immunity.

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- **AI in the Pharmaceutical Industry**
- **Gene therapy**



- **AI in the Pharmaceutical Industry**
 - 1) To speed up the process of finding novel medications.
 - 2) It will also help create customized medications based on each person's genetic composition
 - 3) Can help enhance the clinical trial procedures, thereby saving time and money.

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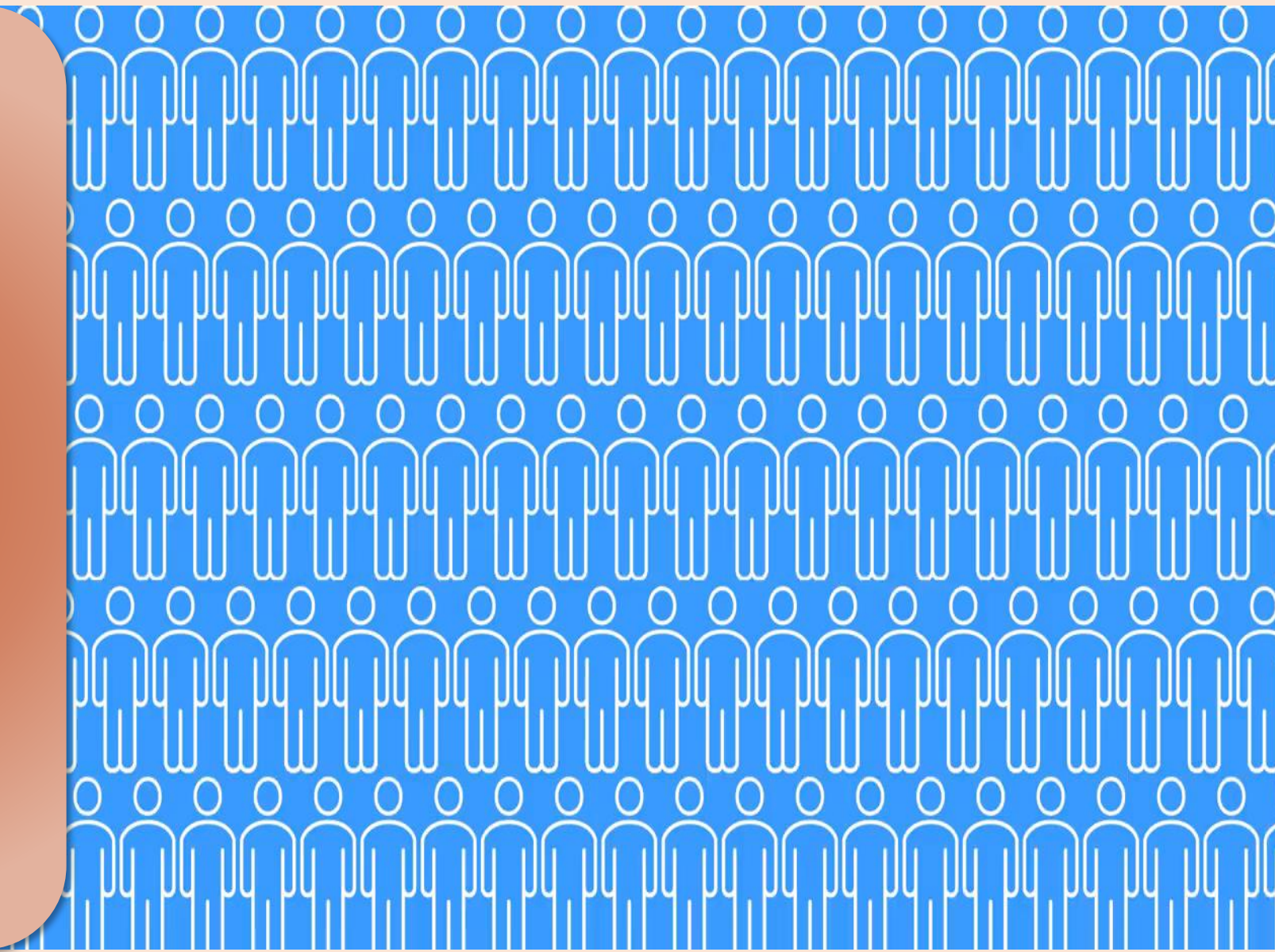
- **AI in the Pharmaceutical Industry**
- **Gene therapy**

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- **Gene therapy**

is a technique that uses a gene to treat, prevent or cure a disease or medical disorder. Often, it works by adding new copies of a gene that is broken, or by replacing a defective or missing gene in a patient's cells with a healthy version of that gene.



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**Thank you for
listening**

References

- Bhat, Priya. 2023. *What does an industrial pharmacist do?* May 30.
<http://www.adatum.com>.
- editorial, Top Doctors. 2023. *Personalized Medicine*. April 2. topdoctors.com.sa.
- Fliesler, Nancy. 2024. *Creating the Next Generation of mRNA Vaccines*. July 29.
<http://www.hms.harvard.edu>.
- ipharmacist. 2023. *Major Job Responsibilities of an industrial pharmacist*. July 9.
<http://www.industrialpharmacist.com>.
- Solomon, Benjamin. 2024. November 30. gnome.gov.