

Match the words with their synonyms.

1. artificial (adj.)

- A) synthetic B) acclaimed
C) confidential D) hilarious

2. combat (v.)

- A) surrender B) defy
C) induce D) refine

3. trigger (v.)

- A) let down B) look up to
C) put up with D) spark off

4. curb (v.)

- A) inhibit B) inherit
C) inhabit D) inhale

5. cope with (v.)

- A) submit B) survive
C) deprive D) develop

6. distinct (adj.)

- A) outstanding B) compelling
C) tempting D) outgoing

7. draw on (v.)

- A) put down B) pick up
C) rely on D) lead to

8. blueprint (n.)

- A) change B) plan
C) promotion D) twist

9. venture (n.)

- A) overview B) outlook
C) insight D) enterprise

10. devastating (adj.)

- A) persuasive B) scarce
C) catastrophic D) terrific

Reading Passage 24

An artificial intelligence (AI) tool may help develop universal vaccines capable of combatting virus variants before they emerge. At the heart of every vaccine is an antigen – a small, safe molecule based on part of the pathogen, which triggers the protective immune response. However, most vaccine antigens are based on a single pathogen component such as the spike protein of the COVID SARS-CoV-2 virus, which curbs their effectiveness and ability to cope with new variants. Now, Oxford-based biotech start-up Baseimmune has developed a remarkable algorithm-based system capable of creating antigens containing all the parts of the pathogen. The distinct vaccine design algorithm draws on genomic, epidemiological, immunological, clinical and evolutionary data to create blueprints for antigens capable of responding to a particular pathogen in its current form as well as likely variants that may arise in the future. They have recently been awarded £3.5m in funding in an investment round led by Hoxton Ventures, an early-stage venture firm based in London. “I grew up in Brazil and saw first-hand the impact of infectious disease as my aunt lived her whole life with the devastating effects of polio, a vaccine-preventable disease,” said co-founder Ariane Gomes. “The COVID pandemic has reminded us that infectious diseases aren’t going anywhere, so we urgently need to develop the next generation of vaccines to help protect us all.

1. The primary purpose of the AI-based vaccine is to ----.

- A) rule out the possibility of development of new virus variants
- B) produce a single vaccine for almost all diseases
- C) improve the effectiveness of existing vaccines
- D) slow down progress of various infectious diseases
- E) increase the number of antigens within the human body

2. What is a drawback to many vaccines that hampers stimulation of immune response against new variants?

- A) They consist of more antigens than humans need for immunity.
- B) Each and every vaccine includes an antigen, a small molecule.
- C) Their antigens are subject to only one pathogen component.
- D) A spike protein causes the antigen in each of them to disappear.
- E) They depend on one single antigen to fight against viruses.

3. The newly developed system makes use of various relevant inputs EXCEPT ----.

- A) human genome
- B) epidemiology
- C) previous studies
- D) immune system
- E) behavioural medicine

4. The attitude of the author towards the newly devised system is ----.

- A) biased
- B) scornful
- C) encouraging
- D) surprised
- E) ridiculing

Choose the best option.

1. ---- the heart ---- every vaccine is an antigen

- A) In / on B) On / from
C) Of / in D) At / of

2. ---- on

- A) based B) led
C) provided D) caused

3.---- the parts of the pathogen

- A) all B) every
C) each D) whole

4. a single pathogen component ---- the spike protein

- A) so that B) as such
C) such D) such as

5. her ---- life

- A) all B) every
C) whole D) each

6. ---- of

- A) keen B) eager
C) willing D) capable

7. I saw ---- the impact of infectious disease.

- A) first-aid B) first-hand
C) first-rate D) first-class

8. a pathogen ---- variants that may arise in the future.

- A) moreover B) also
C) as well as D) furthermore

9. The pandemic has reminded us ---- infectious diseases aren't going anywhere.

- A) to B) this
C) that D) of

10. the next generation ---- vaccines

- A) from B) of
C) to D) by

Okuma Parçası 24

Bir yapay zekâ aracı, virüs varyantları ortaya çıkmadan önce mücadele edebilen evrensel aşuların geliştirilmesine yardımcı olabilir. Her aşının çekirdeğinde bir antijen bulunur- koruyucu bağışıklık tepkisini tetikleyen patojenin bir kısmına bağlı küçük, korunaklı bir molekül. Ancak, çoğu aşı antijeni, COVID SARS-CoV-2 virüsünün sivri uçlu proteini gibi etkinliğini ve yeni varyantlarla başa çıkma yeteneklerini engelleyen tek bir patojen bileşenine bağlıdır. Şimdi, Oxford merkezli biyoteknoloji girişimi Baseimmune, patojenin tüm parçalarını içeren antijenler oluşturabilen, algoritma tabanlı olağanüstü bir sistem geliştirdi. Sıradışı aşı tasarım algoritması, mevcut haliyle belirli bir patojene yanıt verebilen antijenler ve gelecekte ortaya çıkabilecek olası varyantlar için planlar oluşturmak için genetik, epidemiyolojik, immünolojik, klinik ve evrimsel verilerden yararlanır. Yakın zamanda, Londra merkezli bir erken aşama girişim şirketi olan Hoxton Ventures tarafından yönetilen bir yatırım girişiminden 3,5 milyon sterlinlik bir fon aldılar. Kurucu ortak Ariane Gomes, "Brezilya'da büyüdüm ve teyzem tüm hayatı boyunca aşı ile önlenebilir bir hastalık olan çocuk felcinin yıkıcı etkileriyle yaşadığı için bulaşıcı hastalıkların etkisini ilk elden gördüm" dedi. "COVID salgını bize bulaşıcı hastalıkların hiçbir yere gitmediğini hatırlattı, bu yüzden hepimizi korumaya yardımcı olacak yeni nesil aşularını acilen geliştirmemiz gerekiyor.

Match the words with their synonyms.

- 1.A 2.B 3.D 4.A 5.B
6.A 7.C 8.B 9.D 10.C

Reading Passage 24

- 1.A 2.C 3.E 4.C

Choose the best option.

- 1.D 2.A 3.A 4.D 5.C
6.D 7.B 8.C 9.C 10.B