## Elon Musk's Neuralink Wins US Approval to Test Brain-Chips in Humans

May 27, 2023

Neuralink, a company owned by Elon Musk, has been given permission by the US Food and Drug Administration (FDA) to start testing their brain-chip technology on humans. These chips could eventually help people who can't see or move by connecting their brains directly to computers.

Neuralink isn't looking for people to test the chips just yet, though. They tried to get approval before, but the FDA said it wasn't safe enough. The chips, which have been tested in monkeys, work by reading brain signals and sending information to devices like computers and smartphones.

Even with this approval, the technology will need a lot of testing. There are technical issues to work out and ethical questions to answer before these brain implants can be widely used.

Neuralink shared the news on Twitter and thanked the FDA and its own team for their hard work. They also promised to share more information about the human tests soon.

Despite this positive news, Neuralink has often overpromised on how quickly it can make progress. The company wanted to start putting chips in human brains back in 2020 but couldn't. There was also some trouble last year when people accused the company of not treating animals properly during their tests. Neuralink denied these accusations.

Other groups, like Swiss researchers, have also been making progress with brain implants. They helped a man who couldn't move his legs to walk just by thinking about it.

## **Comprehension Questions:**

- 1. Who has given Neuralink permission to test their technology on humans?
- a) Swiss researchers.

b) The FDA.

c) Elon Musk

- d) Twitter users.
- 2. Who could benefit from Neuralink's brain-chip technology in the future?
- a) People who cannot see or move.
- b) People who want to use smartphones.

c) Monkeys.

- d) People who work for the FDA.
- 3. How do Neuralink's brain chips function?
- a) They create new brain signals.
- b) They block brain signals.
- c) They read brain signals and send information to devices.
- d) They disrupt the connection between the brain and computers.
- 4. What was the response of the FDA when Neuralink first tried to get approval?
- a) They immediately approved it.

- b) They said it wasn't safe enough.
- c) They asked for more time to make a decision.
- d) They asked Neuralink to test it on animals.



- 5. Which of these statements is NOT true?
- a) Neuralink has been given permission to start human trials.
- b) Neuralink successfully started human trials in 2020.
- c) Neuralink's technology could help people who can't see or move.
- d) The FDA initially refused Neuralink's request because it wasn't safe enough.
- 6. How did Neuralink communicate the news about their FDA approval?
- a) Through a TV broadcast.
- b) Through a newspaper article.
- c) On Twitter.
- d) Through a phone call
- 7. Which of the following statements best describes the future of Neuralink's brain-chip technology, based on the article?
- a) It will be immediately available for everyone.
- b) It will not be tested on humans
- c) It will require a lot of testing and resolving of technical and ethical issues.
- d) It will be exclusively used by the FDA.
- 8. Why might Neuralink's brain-chip technology be significant for society?
- a) It can make smartphones obsolete.
- b) It could potentially help people who can't see or move to interact with computers.
- c) It will make the FDA more powerful.
- d) It will allow everyone to read each other's minds.
- 9. What is a possible reason why Neuralink shared the news on Twitter?
- a) It is the only way to make announcements on the internet.
- b) The FDA required that they use Twitter.
- c) The announcement will be hidden from Swiss researchers.
- d) Twitter is also owned by Elon Musk.
- 10. What is the main idea of the article?
- a) Elon Musk started a new company.
- b) The FDA has denied Neuralink's request to test brain-chip technology.
- c) Neuralink has been approved to start human trials for its brain-chip technology.
- d) Neuralink has successfully implanted a chip in a human brain.

## **Speaking and Writing Activities:**

- Discuss these questions with a partner or a small group.
- Choose one topic and write a response to it. Show your writing to a classmate or teacher.
- 1. If you could control computers with your brain, what are some things you would want to do?
- 2. How do you feel about the idea of connecting our brains directly to computers? Can you think of any dangers of this new technology?
- 3. Many new medical treatments are tested on animals. Do you think it's okay to use animals this way? Explain.

