**Read the text and answer the questions that follow.**

**The Spread of Drug Resistant Malaria**

(1) The world's most effective anti-malarial drug is artemisinins, but doctors in west Thailand warn that malarial parasites are becoming resistant to it. The march of increasingly drug-resistant malaria across the country has sparked fears that it could reach Africa, where 90 per cent of all malaria deaths occur. Increasing resistance to artemisinins was first identified in Cambodia in 2006, and is now common along its border with eastern Thailand.

(2) Nicholas White of Mahidol University in Bangkok, Thailand, and colleagues looked for signs of resistance in 3,200 patients from clinics on Thailand's western border. They did so by measuring how long it takes for the number of malaria parasites in a person's blood to halve. With artemisinin treatment, this should take around 2 hours. In Cambodia, it now takes approximately 5.5. hours. On Thailand's western border, this figure rose from 2.6 hours in 2001 to 3.7 hours in 2010. The percentage of infections that ***clear*** very slowly - 6.2 hours or more - soared from 0.6 per cent of all patients in 2001 to 20 per cent in 2010 ([*The Lancet*, DOI: 10.1016/S0140-6736(12)60484-X](http://dx.doi.org/10.1016/S0140-6736%2812%2960484-X)). "If it carries on, we will lose the use of these drugs," says White.

(3) There are several factors behind the increasing resistance, including the sale of [diluted artemisinin treatments](http://www.newscientist.com/article/dn13308-csi-malaria--medics-help-bust-fake-drugs-ring.html). Parasites in Cambodia also appear to have enhanced genetic resistance to the drug compared with resistant parasites in other parts of the world. The most important tool needed to contain resistance is finding a genetic marker for it, says White.

(4) The World Health Organization agrees that the search for a reliable marker is paramount. Without this tool, "it's not possible to establish where ***strains*** have spread or emerged anew", says Pascal Ringwald, resistance coordinator at the WHO's global malaria programme in Geneva, Switzerland.

**Circle the correct completion of the following statements.**

1. Drug-resistant parasites discussed in this article
2. have made artemisinins useless.
3. were imported to South-Eastern Asia from Africa.
4. have increased the percentage of deaths from malaria.
5. were initially recognized in Cambodia and then travelled westwards.
6. In order to assess the growing resistance of the parasite, White’s team
7. measured signs of resistance in patients treated in Bangkok.
8. checked the time it takes artemisinin to cure a patient completely.
9. were collecting data about 3,200 malaria patients for more than a decade.
10. compared the speed of patients’ response to the drug in a longitudinal study.

3. Which of the following do we learn about the patients’ response to artemisinin?

1. In Western Thailand it has become more than twice as slow as the norm.
2. The time needed to clear the blood of parasites is soaring **evenly** across Thailand.
3. The number of patients with very slow response has reached one fifth in the area that was studied.
4. While in Thailand the time of response is growing in Cambodia it **hasn’t changed** since 2006.

4. Among the factors that account for the increasing resistance of malaria parasites in the region the text mentions

1. shortage of artemisinin treatments.
2. the use of ill-calculated doses of drugs.
3. strengthening of genetic resistance in the population.
4. inferior quality of the drugs available on the market.

5. The text suggests that the WHO

a. banned the sale of diluted anti-malarial drugs.

 b. is unaware of parasites’ growing resistance to anti-malarial drugs.

 c. succeeded in identifying a genetic marker which will eliminate resistance to drugs.

 d. emphasizes the role of a reliable genetic marker for tracking new strains of parasites.

6. In the context of this article, the word ***clear***, paragraph 2, means

a. to move freely

b. to prove somebody innocent

c. to remove something unwanted.

 7. In the context of this article, the word ***strains***, paragraph 4, means

 a. anxieties

 b. injuries

 c. particular types of plants, diseases, etc.

 d. particular tendencies in the character of a person.