The use of animals is essential to the drug discovery process.

In this article, I write about why animals are used in scientific research and the tests that a chemical compound is supposed to pass before it can be used on animals.

Why are animals used in Scientific Research?

Biologically very similar to humans: Animals are biologically very similar to humans. They have the same kind of structure both externally(pair of eyes, ears etc), internally(a pair of lungs, liver etc) and they might share more than 98% of the DNA with humans.

Susceptible to many of the same health problems: Animals are susceptible to many of the same health problems as humans.

Easy to care for: They are small in comparison to humans. We can control their diet. We can also control the temperature of the room they are kept.

Easy to reproduce: Animals reproduce very fast which may be helpful to use for scientific research purposes.

Tests that a chemical compound is supposed to pass before it can be used on an animal

The compound has to be potent and selective. It needs to be able to kill the parasite inside the cell without harming the cell itself.

Solubility: The compound must be able to dissolve in the stomach.

Permeability: The compound must be able to penetrate through the cell membranes.

Stability: The compound must remain stable and not be broken down by the liver, allowing it to persist in the body.