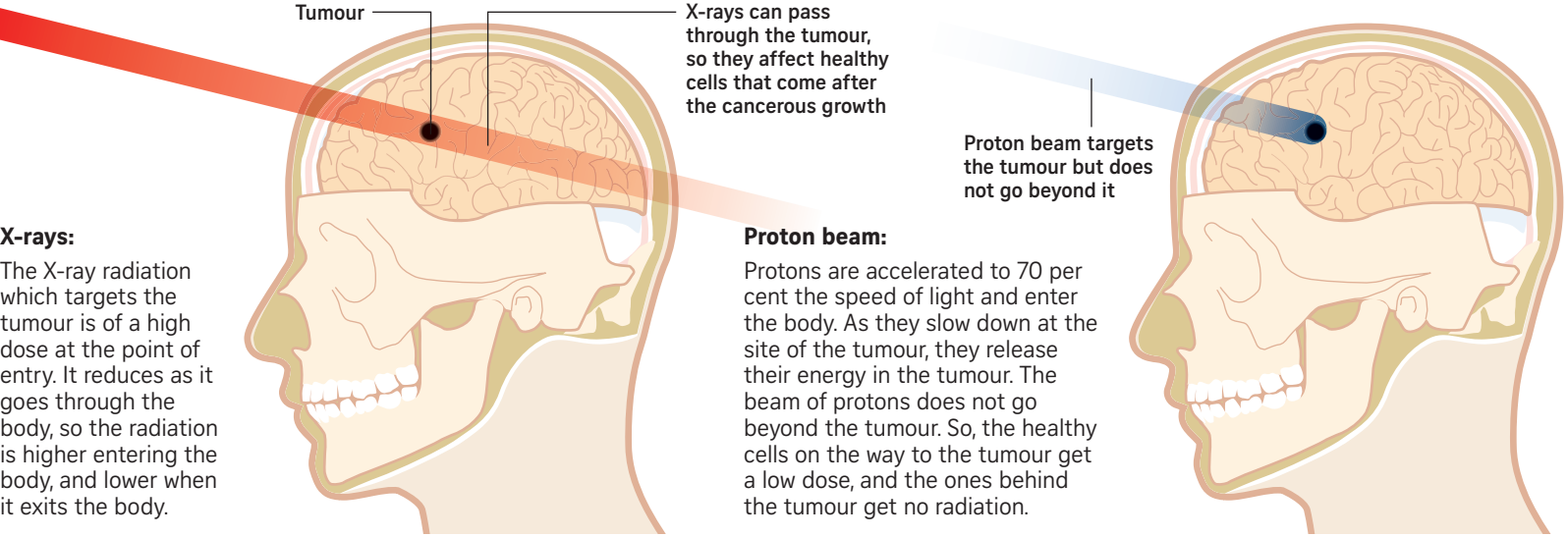
X-rays versus proton beam for brain tumour treatment



X-rays:

The X-ray radiation which targets the tumour is of a high dose at the point of entry. It reduces as it goes through the body, so the radiation is higher entering the body, and lower when it exits the body.

Proton beam:

Protons are accelerated to 70 per cent the speed of light and enter the body. As they slow down at the site of the tumour, they release their energy in the tumour. The beam of protons does not go beyond the tumour. So, the healthy cells on the way to the tumour get a low dose, and the ones behind the tumour get no radiation.

Source: NATIONAL CANCER CENTRE SINGAPORE STRAITS TIMES GRAPHICS