The Effect of Science on Cancer Treatment

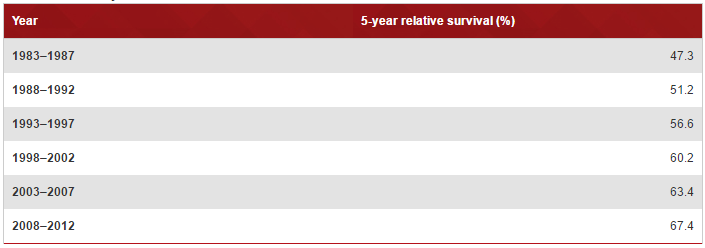
By Jamie Coulson

Cancer is of the most dangerous illnesses known to man. In 2016 alone 130,466 new cancer cases were diagnosed and 46,880 people died from cancer (Australian Government, 2016).

A cancer cell is formed when a regular cell is mutated and then the cancer cell starts spreading uncontrollable. This will eventually grow into a tumour which forms on body once this tumour grows big enough it then allows for cancer cells to enter the bloodstream and travel to other parts of the body.

Apoptosis is a process of a programmed cell death. It is triggered by characteristic cell changes (morphology) and the loss of life. Apoptosis is a cells only defence against cellular mutation. However a cell is able to mutate when the nucleus is mutated and this system is shut down before it can even be set off. This is how cancer cells are able to form (NCBI, 2002).

Cancer can be caused by many things raging form habits (i.e. smoking) to inheriting it genetically from parents or ancestors. The most common cause of cancer and cancer deaths is smoking causing one in every nine people cancer is caused by smoking and a further one in five cancer deaths is caused by smoking (Cancer Council, 2016).



Scientists have not discovered the cure to cancer because of its uniqueness but many foundations (i.e. Cancer Council) have been set up to raise money to help speed up the process of finding a cure. Through this research, scientists have found made massive discoveries in the treatment of cancer which has greatly increased the life expectancy of people that get cancer. In 1983-1987 the 5 year survival expectancy was at 47.3% but in 2008-2012 the percentage has greatly increased from 47.3% to 67.4% (Figure 1) (Australian Government, 2016). This is a massive increase of 20.1% thanks to the help of science.

Figure 1) 5 year survival expectancy (Australian Government, 2016)