Researchers are using nano-sized particles of gold to treat cancer. Many tumour cells have unique protein molecules on their surface. Those proteins are not usually in the body so they are called Antigens. Antibodies are created within the body as a defense mechanism against antigens. Antibodies are specific to the antigens that they bind to just like puzzle pieces. Nano gold particles can be attached to the antibodies specific to the tumour cells.

The tumour cells are easily located due to the gold particles. Once the tumour is located, it can be irradiated with a laser. The energy from the laser is converted to heat by the gold particles. The tumour cells are selectively burnt away due to the heat from the gold nanoparticles while the surrounding tissue has little damage.

This type of treatment should prove to be less invasive with fewer side effects and shorter recovery time.