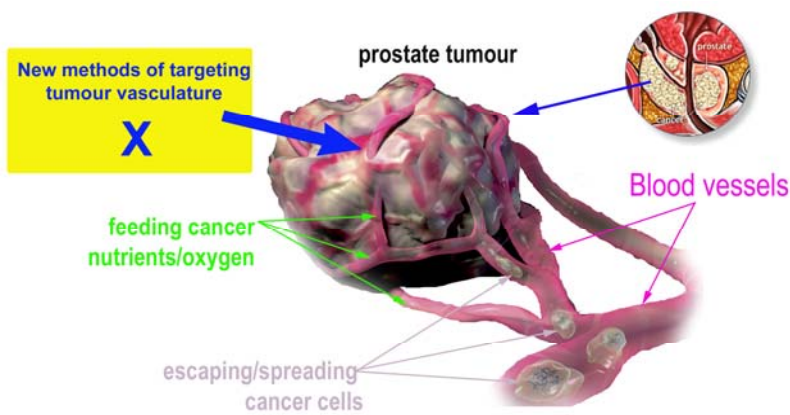


in Metastasis and Angiogenesis Research Group

The spreading of cancer cells in the body, also known as Metastasis, is the main cause that leads to mortality of patients with cancer. Spreading of cancers is controlled by many factors in the body. One of the most important aspects is known as Angiogenesis, the growth of new blood vessels into tumours that ‘fuel’ tumours to rapidly grow and to escape to other part of the body. Generously funded by Cancer Research Wales, we are investigating into new ways to target angiogenesis in prostate cancer and breast cancer (top picture). In addition, we are continuing our research into developing a new anti-cancer method by using a special molecule, known as matriptase (bottom pictures).



Angiogenesis in prostate cancer. Ingrowth of new vessels would provide fresh nutrients and oxygen to cancer cells to feed the growth. The new vessels would also provide escaping route for cancer cells to spread. We are currently working on new ways to blocking the new vasculature in tumours.

Matriptases are a group of proteins that influence the behaviour of cancer cells. We have discovered that one of the matriptases has a strong impact on the aggressiveness of prostate cancer cells as shown in the pictures of the right. We are presently evaluating the possibility of using this molecule in the intervention of prostate cancer and its spread.

