

Introduction

Hepatocellular carcinoma (HCC) is the fifth most prevalent cancer world-wide and third highest in terms of mortality (**Parkin et al, 2001**).

Surgical methods remain the gold standard for the treatment of hcc. However; this is feasible in only 25-30% of patients because of tumour stage or the severity of underlying cirrhosis (**Llovet et al, 2002- Lo et al, 2002- Llovet et al, 2003- Gamma et al, 2002**).

Transarterial chemoembolisation (TACE) is the most widely used treatment for hepatocellular carcinoma in non surgical patients not suitable for radiofrequency ablation (**Brown et al, 2006**).

Lipidol which is used in conventional transarterial chemoembolisation (TACE), penetrates the portal venules and hepatic sinusoids and affects the hepatic microcirculation (**Tancredi et al, 1999**), also doxorubicin is lost from lipidol in a very short period of time and lipidol droplets separate rapidly from the aqueous phase (**lewis et al, 2006**).

Drug eluting bead is an embolisation system for loading with doxorubicin in the treatment of malignant hypervascularised tumours. It has been shown to be clinically effective in HCC, neuroendocrine disease and other malignancies (**Poon, 2004- Varela et al, 2005- Coenegrachts et al, 2005**).