Medical Xpress

Liquorice Cancer Care

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Liquorice compounds could be a key component for cheaper, more effective liver cancer treatment, reports Lisa Richards in *Chemistry & Industry* magazine.

Liver cancer affects over 2,800 people in the UK each year, of which nearly 2,700 die, according to Cancer Research UK. Surgery is the best option, but is unsuitable for most patients, and liver tumours are very resistant to chemotherapy.

Studies in mice by Zhi Yuan and his team at Nankai University, China, revealed that the liquorice compounds, glycerrhetinic acid and glycerrhizic acid, preferentially accumulate in the liver. And when attached to anti-tumours drugs, they are more effective tissue-specific drug carriers than the traditionally used antibodies and oligopeptides (*Polymer International* DOI 10.1002/pi.2051).

‘Our primary results show that they are effective as liver targeting carriers,’ says Yuan. Clinical trials are planned for the near future. In addition, glycerrhizic acid is tens of thousands of times cheaper and easier to isolate than the antibodies usually used.

Tim Meyer, Consultant Medical Oncologist at the Royal Free Hospital London agrees, that tissue-specific drugs could potentially provide more effective treatment, because a higher concentration of the drug is delivered to the tumour. This would reduce the dose required and significantly decrease toxic effects on other parts of the body.

Source: Society of Chemical Industry