Title: Transporter-targeted cholic acid-cytarabine conjugates for improved oral absorption

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<DOCHEAD>Short communication

<AT>Transporter-targeted cholic acid-cytarabine conjugates for improved oral absorption

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<ABS-HEAD>Abstract

<ABS-P>Cytarabine has a poor oral absorption due to its rapid deamination and poor membrane permeability. Bile acid transporters are highly expressed both in enterocytes and hepatocytes and to increase the oral bioavailability and investigate the potential application of cytarabine for liver cancers, a transporter- recognizing prodrug strategy was applied to design and synthesize four conjugates of cytarabine with cholic acid (CA), chenodeoxycholic acid (CDCA), hyodeoxycholic acid (HDCA) and ursodeoxycholic acid (UDCA). The anticancer activities against HepG2 cells were evaluated by MTT assay and the role of bile acid transporters during cellular transport was investigated in a competitive inhibition experiment. The *in vitro* and *in vivo*