

Technology/ Title	DBPR376- New Luteinizing Hormone-Releasing Hormone Receptor (LHRHR)-Targeting Small Molecule Mertansine Conjugate for Cancer Treatment	
Technology Type	<input type="checkbox"/> Biotechnology	<input type="checkbox"/> Device/Diagnostics
	<input checked="" type="checkbox"/> Pharmaceutical	<input type="checkbox"/> Others: _____ -
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Link	N/A	
Technology Description	<p>Ligand-targeted drug conjugates offer enormous potentials to enhance the precision and efficacy of anticancer therapies. Current drug conjugates are designed to target disease-associated antigens or receptors for delivery of toxic agents to tumor sites.</p> <p>We have employed novel and modified LHRH peptide antagonist as a targeting ligand and combined with patented linker-mertansine for selective drug-delivery to the tumor site through selectively binding to LHRHR with high affinity, and showed potent anticancer efficacies in many different cancer models.</p> <p>COMPETITIVE ADVANTAGES</p> <ul style="list-style-type: none"> ➤ Our SMDC presents a pharmacokinetically optimizable, cost-effective, single-component, and chemically defined SMDC for effective treatment of LHRHR-expressing cancers. ➤ It demonstrates potent efficacy (remission) against triple negative breast cancer (TNBC) and ovarian cancer. ➤ Tumor-associated LHRHR can serve as biomarkers for selection of patients. 	
Intellectual Property	N/A	
Key Publications	Luteinizing hormone-releasing hormone receptor (LHRHR), not readily detectable in normal visceral organs, were found to be overexpressed in the plasma membrane of several types of cancers ranging from 86% of prostate cancer, 80% of human endometrial and ovarian cancers, 80% of renal cancer, 50% of breast cancers, and 32–50% of pancreatic cancers.	
Business Opportunity	This is a first-in-class and novel design of drug delivery system capable of being developing into theranostics with precision medicine application potential.	