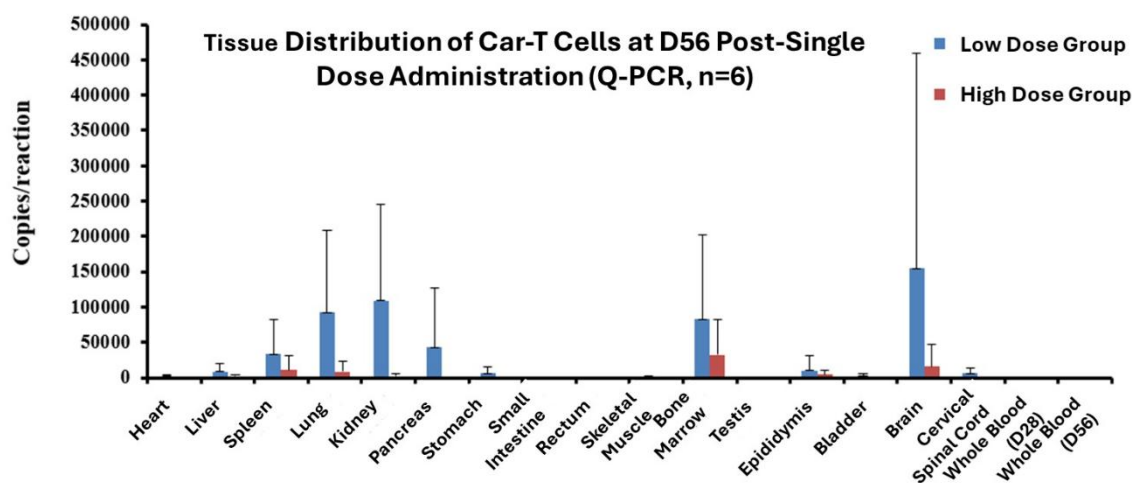


Therapeutic Areas: Cell Therapy

We support preclinical development of both genetically modified and non-genetically modified cellular therapies through advanced in vitro and in vivo platforms. Equipped with tools such as in vivo imaging, flow cytometry, ELISPOT, and immunofluorescence, we conduct comprehensive safety and functional studies on CAR-T, CAR-NK, TCR-T cells, stem cells, and other immune cell types. These models are vital in evaluating efficacy and safety of cell therapies targeting cancer and immune disorders.



The biodistribution, cell migration, colonization (homing), differentiation, and biological behavior of cell therapy targets are investigated with multiple detection techniques including in vivo imaging, flow cytometry, immunofluorescence / histochemistry, as well as qPCR.

Cellular Product Quality Control Testing	Test Items
Cell identification	
Survival rate and proliferation capacity	
Purity and homogeneity	

Sterility testing and mycoplasma testing	
Endotoxin testing	
Detection of intracellular and exogenous factors	In vitro blood adsorption / hemagglutination assay with different passaged cell culture media
	Intracerebral and intraperitoneal inoculation in mice
	Intracerebral and intraperitoneal inoculation in suckling mice
	Chicken embryo yolk sac cavity inoculation
	Chicken embryo urinary bladder cavity inoculation and urinary bladder fluid hemagglutination test
	Guinea pig intraperitoneal inoculation
	Subcutaneous/intracutaneous inoculation in rabbits
Abnormal immune response	
Tumorigenicity testing	In vivo tumorigenicity test in nude mice
	Tumorigenicity assay for different generations of cells
	Soft agar clone formation test
	Telomerase activity test
	Karyotype analysis
Biological effectiveness testing	

Detection of residues of other added components and non-functional heterogeneous cell populations in the culture system	
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Research Projects Accomplished

We have accomplished study on 3 immune cell therapy (DC, CIK, CTL), 6 CAR-T and TCR-T projects, 4 stem cell and iPSC projects, 2 stem cell devices, and 16 investigational study on new cell therapy targets.



Live Imaging System for Small Animals



Automated Multifunctional Fluorescence Microscopy Imaging System



Elispot



Triple Laser 13-Color Flow Cytometer



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