

Indication/technology	Modality	Description	Discovery	Proof of concept	Lead	Preclinical	Phase I	Phase II	Phase III
INFECTIOUS DISEASE									
Ross River Virus	Small molecule	Pentosan polysulphate for the treatment of alphaviral-induced arthritis							●
Sepsis	Small molecule	Novel small molecule for the treatment of sepsis							●
Gonorrhoea	Small molecule	Repurposed drug exploiting novel target to treat and prevent gonorrhoea in women						●	
Bacterial infections	Small molecule	Repositioned drug to treat various bacterial infections including gonorrhoea and <i>H. pylori</i>						●	
Rheumatic Heart Disease (Strep A)	Vaccine	A peptide-based M protein vaccine for prevention of superficial, invasive and autoimmune streptococcal A diseases						●	
Zika virus vaccine	Vaccine	A live-attenuated virus generated using codon deoptimisation for prophylactic vaccine use against Zika virus						●	
Malaria	Small molecule	Repurposed drug for the treatment and prevention of malaria by preventing red blood cell invasion						●	
Malaria	Vaccine	Whole parasite, blood-stage malaria vaccine						●	
Babesiosis	Vaccine	Whole parasite vaccine for prevention of Babesiosis in humans, dogs and cattle						●	
COVID-19	Vaccine	A live-attenuated virus generated using codon deoptimisation for prophylactic vaccine use against SARS-CoV-2						●	
Chikungunya	Vaccine	A live-attenuated virus for prophylactic vaccine use against CHIKV						●	
Giardia	Small molecule	Novel anti-giardial compound without unwanted anti-microbial side effects						●	
Gonorrhoea	Vaccine	Antigens for use in a vaccine to prevent gonorrhoea						●	
COVID-19	siRNA	Novel siRNA treatment for targeting SARS-CoV-2 virus						●	
Spotty liver disease	Small molecule	Repositioned drug to treat <i>Campylobacter hepaticus</i> infection in chickens						●	
Parainfluenza	Small molecule	First in class novel chemical entities that inhibit hPIV Haemagglutinin Neuraminidase						●	
Streptococcal toxic shock syndrome	Monoclonal antibody	mAbs for the treatment of Streptococcal toxic shock syndrome and clearance of bacterial infection			●				
Norovirus	Nanobody	Novel nanobodies for treatment of norovirus through inhibition or interference with NHBA binding pocket			●				
Aspergillus	Small molecule	First in class novel chemical entities for inhibition of UDP-galactopyranose mutase (UGM) in fungi			●				
Rheumatic Heart Disease (Strep A)	Immunotherapy	Low-dose IL-2 therapy to rescue from Rheumatic Heart Disease			●				
Bacterial infections	Small molecule	New chemical entities to treat various MDR bacterial infections via disruption of metal homeostasis			●				
Malaria	Vaccine	Novel combination of antigens targeting multiple life stages of malaria parasite			●				
HIV	Vaccine	Novel vaccine candidates addressing glycan shield complications			●				
HIV	Small molecule	Repositioned drugs to expose latent HIV-infected cells to the immune system			●				
Pneumonia/Otitis media	Vaccine	Rationally designed vaccine to protect against <i>NTHi</i>			●				
COPD/Otitis media	Vaccine	OMV vaccine to protect against <i>Moraxella catarrhalis</i>			●				
Porcine diseases	Vaccine	Novel platform for vaccination of pigs			●				
Tuberculosis	Small molecule	Novel chemical entities for long acting treatment of tuberculosis	●						
Tuberculosis	Small molecule	Novel use of known compounds for treatment of active and latent tuberculosis	●						
Respiratory Syncytial Virus (RSV)	Vaccine	Live-attenuated vaccine using codon deoptimisation	●						
ONCOLOGY									
Resistant-tumour treatment	Small molecule	Multi-targeting thiosemicarbazone compound with anti-metastatic properties			●				
Various	Small molecule	New chemical entities to treat various cancers via disruption of metal homeostasis			●				
Various	Vaccine	Therapeutic vaccines for breast cancer, colon cancer, melanoma			●				
NEURODEGENERATIVE DISORDERS									
ALS/Multiple Sclerosis (MS)	Small molecule	Novel chemical entities that prevent axonal degradation through SARM1 inhibition			●				
Neurodegenerative diseases	Small molecule	Iron (II) selective chelators that reduce iron overload and reverse the neuro-inflammation			●				

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REG MED	REGENERATIVE MEDICINE									
	Spinal cord injury repair	Cell therapy	A novel 3D cellular structure using olfactory ensheathing cells to promote spinal cord nerve regeneration							
	Peripheral nerve repair	Cell therapy	Purified olfactory ensheathing cells that promote regeneration of injured peripheral nerves							
DIAGNOSTICS	Indication/technology	Modality	Description							
	ONCOLOGY									
	Liver fibrosis	Protein saliva detection	A panel of up to 6 biomarkers to screen for and/or diagnose various stages of liver fibrosis up to liver cirrhosis							
	Pan-cancer	Neu5Gc detection	Sensitive detection of Neu5Gc in blood							
	HPV+ oropharyngeal cancer	Saliva detection	A panel of up to 9 miRNA biomarkers for diagnosing HPV+ oropharyngeal cancer							
	Oral cancer	Saliva detection	A panel of up to 8 miRNA biomarkers for diagnosing oral cancer, and subset of 4 miRNA biomarkers for diagnosing oral potentially malignant disorder							
	Head and neck cancer	Saliva detection	A saliva test to predict relapse of head and neck cancer							
	INFECTIOUS DISEASE									
	Chronic fatigue syndrome and long COVID	Genetic polymorphism	Detection of single nucleotide polymorphisms in TRP ion channels as a diagnostic/screening panel for CFS and long COVID detected from blood							
	Human T-lymphotropic virus 1 (HTLV-1)	CRISPR probe	Highly sensitive CRISPR CAS13a probes for rapid, quantitative detection of HTLV-1 in blood							
	Norovirus	Lateral flow	Point of care diagnostic for detection of norovirus							
	Long covid/cardiovascular disease	Blood assay prognostic	Prognostic to determine risk of cardiovascular disease or long covid following infection							
	Hepatitis B virus (HBV)	CRISPR probe	Highly sensitive CRISPR CAS13a probes and methods for quantitative detection of HBV in blood							
PLATFORMS	VACCINE AND VACCINE DELIVERY PLATFORM TECHNOLOGIES									
	Biopolymer vaccine platform	Vaccine	Engineered biopolymer particles coated with antigens/epitopes of interest							
	Whole parasite vaccine platform	Vaccine	Field-deployable whole parasite vaccine platform							
	Codon deoptimisation vaccine platform	Vaccine	Advanced live attenuation platform to overcome reversion to virulence							
	Mucosal delivery platform	Therapeutic delivery	LNPs for mucosal delivery of therapeutics and vaccines							
	Cell-targeting lipid particles	Therapeutic delivery	Novel particles for delivery of therapeutics and vaccines to key tissues							
	taRNA vaccine platform	Vaccine	An mRNA translation system that reduces dosage requirements and prolongs in vivo protein production							
TOOLS	Synthetic LNPs	Therapeutic delivery	Scalable synthetic LNPs with targeted delivery of therapeutics and vaccines							
	TECHNOLOGIES									
	ImmuneMod	Service	Quantification of immunomodulatory agents in food and other products							
	CryptiMap	Service	Identification of cryptic pockets in target proteins for drug discovery							
	Glycan array	Product	Glycan libraries printed on array slides							
	Bioseparation resin	Material	A biopolymer resin coated with binding epitopes for a protein of interest which are dissociated under selective conditions							
	Synthetic oligonucleotide synthesis tools	Tool	A novel set of phosphoramidites coupled with innovative chemical processes to optimise DNA/RNA oligonucleotide synthesis							
	Phosphate masking groups	Tool	Novel chemical groups for protecting nucleotide phosphate groups to facilitate intracellular delivery							

	Indication/technology	Modality	Description	Proof of concept	Prototype	Lead product	On market
MEDTECH	MEDICAL DEVICES						
	Lights Out	Digital tool	Apps and web-based sleep treatment program for children	—●—	—●—	—●—	
	BioSpine 2.0	Device and system	Neurorehabilitation system for spinal cord injury	—●—	—●—	—●—	
	BioWraps 2.0	Device	Functional Electrical Stimulation (FES) applicator for orthopaedic rehabilitation	—●—	—●—	—●—	
	Implant for surgical repair of wrist ligament	Device	3D printed wrist ligament scaffold for orthopaedic surgery	—●—	—●—	—●—	
	Fetal risk assessment system	Digital tool	AI-based CardioTocoGraphy fetal risk assessment and monitoring system	—●—	—●—		
	Smarti-Wear	Device and digital system	Smart garments for assessment of biomechanics in orthopaedics and athletic training	—●—	—●—		
	Bone pin navigator	Digital tool	Bone strength mapping tool for robotic assisted total knee arthroplasty (TKA) pin placement	—●—			
	Bone biomaterials	Method	Ion-rich biomaterials bone regeneration method	—●—			
	Bone graft	Device	Biomimetic bone graft scaffold design with integrated immunosenescence modulation for aged populations	—●—			
	Haemostatic material	Material	Next generation haemostatic material	—●—			
	GaitAnalytica	Digital tool	Gait analysis system for early detection and monitoring of neuromusculoskeletal condition	—●—			