

Infectious Diseases

Drug Class	Product Candidate	Indication (Targets)	Pre-clinical	Phase 1	Phase 2	Phase 3	Commercial	Rights/Collaborator
mRNA	BNT162b2	COVID-19						Fosun Pharma (China), Pfizer (global, excl. China)
	BNT161	Influenza (mod mRNA)						Pfizer
	Un-named program	Influenza (sa mRNA)						Pfizer
	Un-named program	Shingles						Pfizer
	Un-named program	Malaria						Fully-owned
	BNT164	Tuberculosis ¹						Bill & Melinda Gates Foundation
	Un-named program	HSV 2						Fully-owned
	Un-named program	HIV ¹						Bill & Melinda Gates Foundation
	Undisclosed programs	Additional mRNA vaccine programs ²						Fully-owned
Undisclosed programs	Precision antibacterials						Fully-owned	

1 Collaboration with Bill & Melinda Gates Foundation. BioNTech holds worldwide distribution rights except developing countries where BMG holds distribution rights

2 University of Pennsylvania collaboration

Oncology

Drug Class	Platform	Product Candidate	Indication (Targets)	Pre-clinical	Phase 1	Phase 2	Phase 3	Rights/Collaborator
mRNA	FixVac (fixed combination of shared cancer antigens)	BNT111	Advanced melanoma					Fully-owned
		BNT112	Prostate cancer					
		BNT113	HPV16+ head and neck cancer					
		BNT115	Ovarian cancer ¹					
		BNT116	NSCLC					
	iNeST (patient specific cancer antigen immunotherapy)	autogene cevumeran (BNT122)	1L melanoma					Genentech (global 50:50 profit/loss share)
			Adjuvant colorectal cancer					
			Solid tumors					
	Intratumoral Immunotherapy	SAR441000 (BNT131)	Solid tumors (<i>IL-12sc, IL-15sushi, GM-CSF, IFNα</i>)					Sanofi (global profit/loss share)
RiboMabs (mRNA-encoded antibodies)	BNT141	Multiple solid tumors (CLDN18.2)					Fully-owned	
	BNT142	Multiple solid tumors (CD3+CLDN6)						
RiboCytokines (mRNA-encoded cytokines)	BNT151	Multiple solid tumors (Optimized IL-2)					Fully-owned	
	BNT152, BNT153	Multiple solid tumors (IL-7, IL-2)						
Cell Therapies	CAR-T Cells + CarVac	BNT211	Multiple solid tumors (CLDN6)				Fully-owned	
		BNT212	Pancreatic, other cancers (CLDN18.2)					
	Neoantigen-based T cells	BNT221 (NEO-PTC-01)	Multiple solid tumors				Fully-owned	
	TCR engineered T cells	To be selected	All tumors				Fully-owned	
Antibodies	Next-Gen CP Immunomodulators	GEN1046 (BNT311)	Metastatic NSCLC (PD-L1×4-1BB)					Genmab (global 50:50 profit/loss share)
		GEN1046 (BNT311)	Multiple solid tumors (PD-L1×4-1BB)					
		GEN1042 (BNT312)	Multiple solid tumors (CD40×4-1BB)					
Targeted Cancer Antibodies	BNT321 (MVT-5873)	Pancreatic cancer (sLea)					Fully-owned	
SMIM	Toll-Like Receptor Binding	BNT411	Solid tumors (TLR7)					Fully-owned

1 Investigator-initiated Phase 1 trial

FPD, First Patient Dosed; mod, modified; sa, self amplifying; CP, Checkpoint inhibitor; SMIM, Small Molecule Immunomodulators