

KOREA DRUG DEVELOPMENT FUND

**YOUR GATEWAY FOR INNOVATIVE DRUG
CANDIDATES IN SOUTH KOREA**

**KOREA
DRUG
DEVELOPMENT
FUND**

Version 1.0

Published by Korea Drug Development Fund

Publication date April 2022

Address 9F KPX Building 137 Mapodaero Mapo-gu Seoul 04143 Korea

Tel +82-2-6379-3050

E-mail kddf_bd@kddf.org

Website www.kddf.org/en

Collaboration with KDDF will help you to...

1. Find

promising drug candidates
from the biopharmaceutical
sector



2. Learn

about KDDF's programs
on promoting promising
drug pipeline



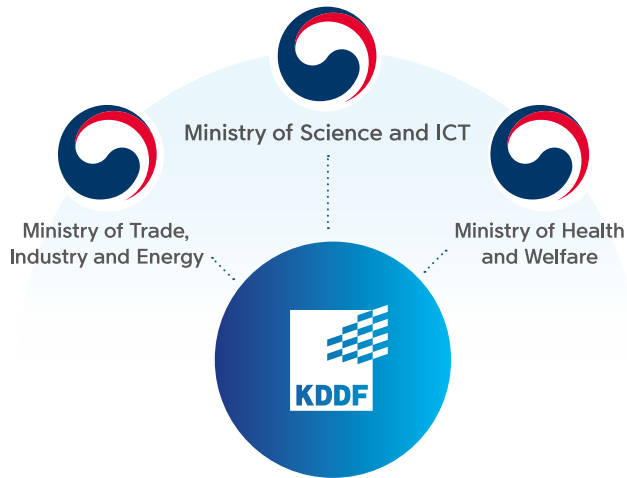
3. Explore

opportunities to co-develop with
KDDF high profile pipeline

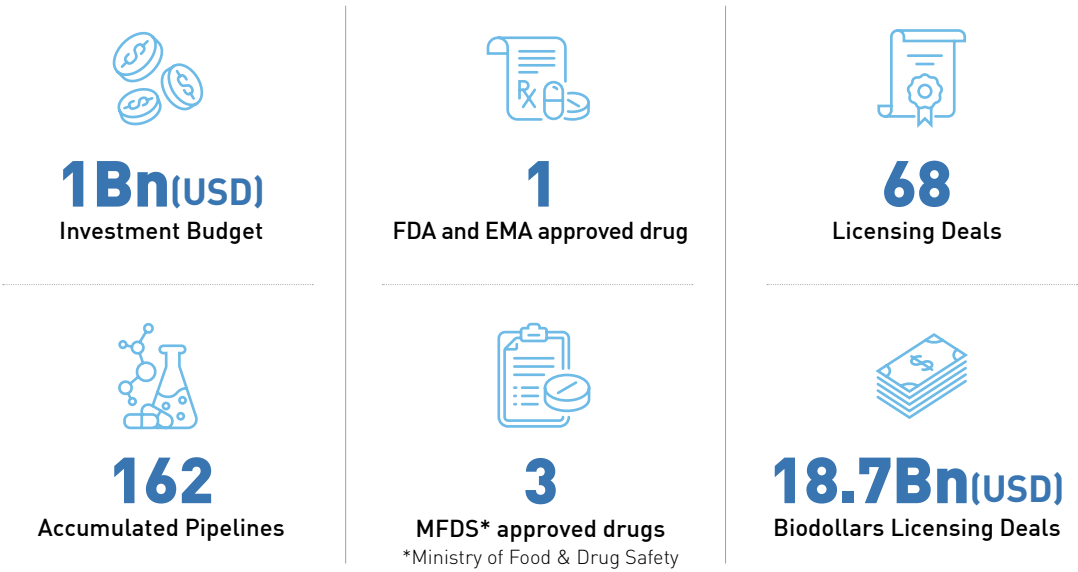


Who we are

KDDF is a national consortium of three government ministries and was established in 2011 to foster drug development program in Korea.

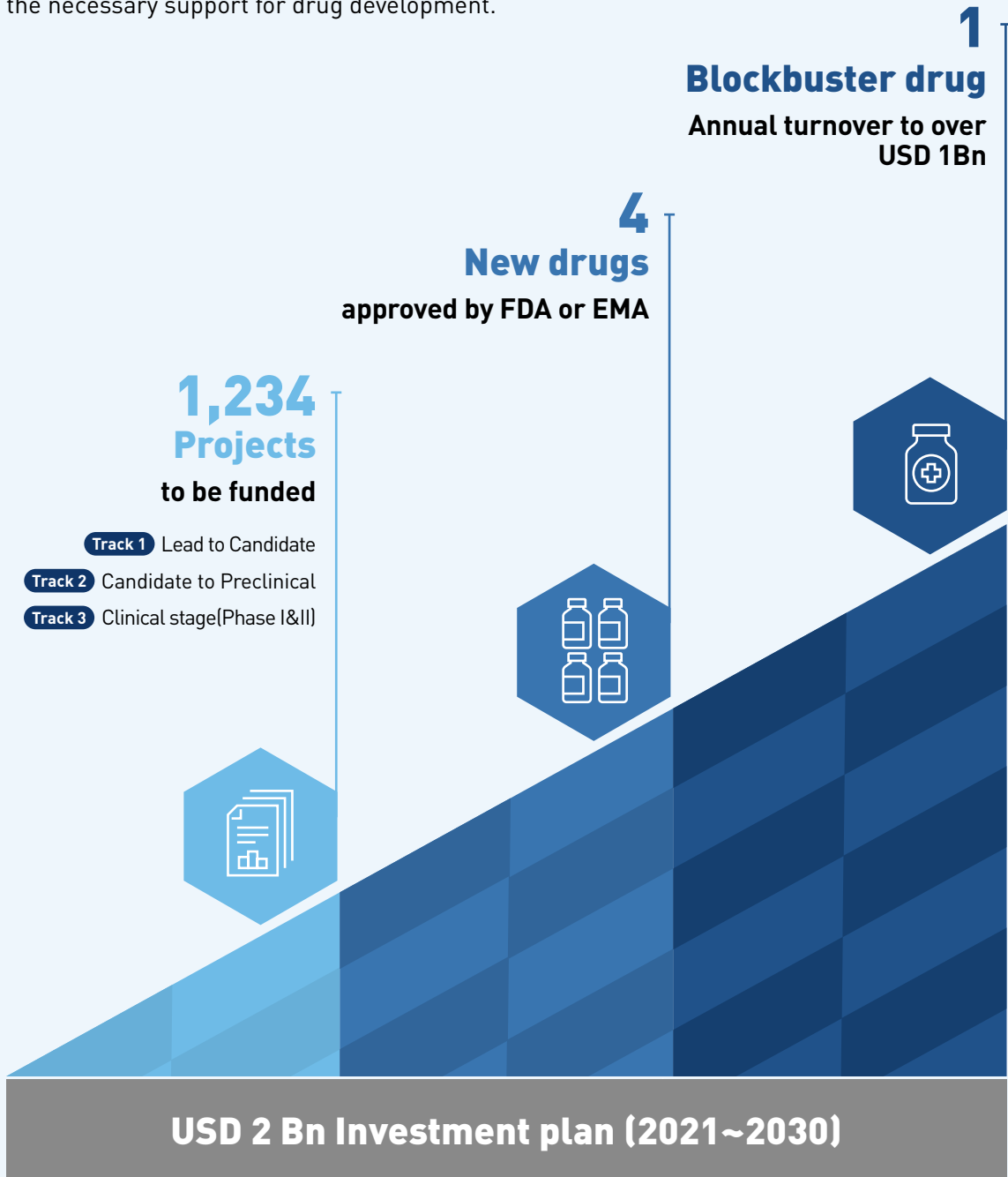


What we have accomplished (2011~2020)



Our Goals by 2030

With a mission to advance Korea's biomedicine technologies and meet global standards, KDDF aims to actively fund and provide the necessary support for drug development.



KDDF pipeline by therapeutic area

(as of March 2022)

ONCOLOGY

Doppel ●
DLL3 ●
FGFR3 ●
TROP2 ●●
C-kit(CD117) ●●
CCSP-2 ●
CD20 & CD55 ●
oncokine-2 ●
DDOST ●
VISTA, VISTA inhibitor ●●
NSN-001 ●
PTK7 ●
TIGIT ●
CD300c ●●
PD-1 ●●●
PD-L1 SIRPa ●
PD-L1XCD3 ●
B7-H4(VTCN1), 4-1BB(CD137) ●●
PD-L1, LAG-3 ●●●
HLA-G/CD3 ●
PD-L1, CD47 ●●
c-MET, EGFR ●●●
CD5 CAR-NK ●
B7H3 CAR-T ●
CD40 ●
CD19 ●●●
FAF1 ●
IL-21, PD-1 ●
Dendritic cell ●
Topoisomerase / IAPs ●
EpCAM ●
TGFb1, HSP27 ●

KRAS mutant ●
CAR-DEGRON-T ●
Prostate-Specific Membrane Antigen ●●●●
IL-2RBy ●
TPST2 ●
TRIM29 ●
PIN1 ●●
EGFR mutation ●
GLS1 ●
C797S mutation in EGFR ●●●
HER2 ●
HDAC6/8 dual-inhibitor ●
Mps1 ●●
TRIB2 ●
HMGCLL1 ●
BTK(C481S) ●
PIM Kinase ●●
p53 or USE1 ●
USP21 ●
EZH1/2 ●●
Prostate-Specific Membrane Antigen ●●●●

CARDIOVASCULAR

miRNA(miR-A, 12803p, 34a-5p, B, 203a-3p) ●
c-Met receptor ●
PP1 ●●
pendrin ●
DPP-4 ●●●●

GASTROINTESTINAL DISEASE

Ghrelin receptor ●
PYGL(Glycogen phosphorylase) inhibitor ●●



RESPIRATORY DISEASE

- Robo1 ●
- Foxj1 ●
- BLT2 ●



CNS DISEASE

- CD40 ●
- eIF4E Suppressor ●●
- Parkin, PGC-1α ●
- LRRK2 ●
- MeCP2 ●
- α2 adrenergic, NDRI ●
- α-synuclein ●
- ASK1 ●
- 4R Tau Oligomers ●



METABOLIC DISORDERS

- CR-P1 ●
- Resistin, CAP1 binding inhibitor ●
- glucagon ●●●●
- FABP4, FABP5 ●
- hGH receptor ●
- FGF21, GLP-1, GCG, α-cytokine ●
- SMS1 ●
- SGLT1/2 ●●●●
- PPARγ/AMPA dual agonist ●
- atypical PKC subtype ●
- PAK4 ●
- IP6K ●
- MLKL ●
- USP1 ●



IMMUNOLOGY

- ROS ●●
- Hyaluronic acid ●
- FPR2 ●●●
- EGR1 ●
- STAT3 ●
- CR-E1 ●
- NLRP3 ●
- Tyk2 ●
- SOS1/RAS ●
- IL-33 ●
- CHIT1(Chitotriosidase) ●
- PKM2 ●



OPHTHALMOLOGY

- CEP290 ●
- PDK4 ●
- TGase2 ●
- TRAP1 ●



OTHERS

- Cathepsin K ●
- C5 Inhibitor ●●
- ABO BCR, CD3 ●
- Gadolinium-based contrast agents (D03A-tranexamic acid conjugated) ●●●●
- TLQP21 ●
- NPR-B ●●
- Atrogin-1 ●
- DRAK1, ADCK4, CDC42BPA kinase ●
- KV7.4 ●

[See page 8~15 for program details](#)

Strong Points of KDDF Pipeline

1. Only competitive drug development projects are selected



2. Development Consulting



Bio-pharmaceutical Inter-organization Development and Global extension II

BRIDGE program is designed to bridge very early stage drug discovery to clinical development by providing proficient development consulting services and utilizing all the public drug development resources.



Facilitating partnership Among Stakeholders for Advancing Clinical Trial

FAST ACT program aims to reduce clinical attribution rate and to increase success rate for clinical trials from biotech and pharmaceutical companies. KDDF provides in-depth consulting services for clinical trial strategies and protocol designs from top class clinical experts.

3. Business Development and Licensing Support

KDDF funds and sponsors innovative drug development projects from lead to the clinical stage, encompassing academia, research institutes, biotech and pharmaceutical companies. Besides funding drug development projects, KDDF also supports business development, including out-licensing funding for projects and in-sourcing of drug seeds from abroad.

CPG

Co-Development partnering for Globalization

CPG program offers business development consulting services through professional life science advisory firms. Out-licensing and co-development will be accelerated via global network of KDDF, outreach marketing, valuation and deal strategy.

Global C&D

Global Connect and Development

C&D program provides an open innovation strategy, seeking potential drug candidates to co-develop with international organizations via Global Sourcing.

Joint R&D

Joint R&D track

Joint R&D track is a top-down collaboration model partnering with Multinational Corporation (MNC). KDDF and MNC will interact with each other through MOU to develop and commercialize drugs originating from Korean organizations.

Pipeline Details (as of March 2022)

ONCOLOGY						
Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
ADC	Cancer Doppel					Seoul National University -
	Rare cancer DLL3					IntoCell, Inc -
	Glioblastoma FGFR3					AimedBio, Inc FGFR3
	TNBC, NSCLC TROP2					LegoChem Biosciences, Inc TROP2-ADC
	Gastrointestinal stromal tumor C-kit (CD117)					Novelty Nobility, Inc NN3201
Antibodies	Metastatic colorectal cancer CCSP-2					Asan Medical Center -
	non-Hodgkin lymphoma, Chronic lymphocytic leukemia CD20 & CD55					Korea University -
	Metastatic malignant melanoma oncokine-2					Korea University -
	Lung cancer DDOST					Hanyang University -
	NSCLC VISTA, VISTA inhibitor					PharmAbcine, Inc PMC-309
	Metastatic NSCLC NSN-001					NEX-I, Inc -
	Esophageal squamous cell carcinoma, TNBC PTK7					Yonsei University -
	Solid tumor TIGIT					HanAll BioPharma -
	Solid tumor CD300c					CentricsBio, Inc CL7

ONCOLOGY

Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
Antibodies	Advanced solid tumor PD-1					Y-biologics, Inc. YBL-006
	Solid tumor PD-L1SIRPa					PharmAbcine, Inc -
	Solid tumor PD-L1XCD3					MustBio -
	Solid tumor B7-H4(VTCN1), 4-1BB(CD137)					ABL Bio ABL103
Bispecific	Advanced or metastatic solid tumor PD-L1, LAG-3					ABL Bio ABL501
	Colorectal cancer HLA-G/CD3					Y-biologics, Inc. HLA-GxCD3 ALiCe
	TNBC PD-L1, CD47					ImmuneOncia Therapeutics Inc. IOH-001
	NSCLC c-MET, EGFR					ChongKunDang CKD-702
CAR-NK	Blood cancer CD5 CAR-NK					KRIBB -
	Solid Tumor B7H3 CAR-T					Seoul National University -
CAR-T	Blood tumor CD40					TiCARos CD40 switchable CAR T cells
	Non-small cell lymphoma CD19					CuroCell, Inc CRC01-01
Exosome	Pancreatic cancer, Liver cancer FAF1					Chungnam National University -
Fc recombinant protein	Cancer IL-21, PD-1					BIOnSYSTEMS, Inc BNS001
Hybrid nano DC	Cancer Dendritic cell					Yonsei University HynaDC
Nanoparticle	Cancer Topoisomerase /IAPs					KIST KM0022

ONCOLOGY

Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
Oncolytic virus (Herpes)	Ovarian cancer EpCAM					Gencellmed, Inc oHSV-1
Oncolytic virus (adeno) + MSC conjugate	Pancreatic cancer, Liver cancer TGFb1, HSP27					Yonsei University -
Peptide	Pancreatic cancer, Lung cancer KRAS mutant					NA Vaccine Institute NexaVac
PROTAC-CART conjugate	Blood cancer CAR-DEGRON-T					KRICT -
Radio-liganded	Prostate cancer Prostate-Specific Membrane Antigen					FutureChem Co., Ltd [177Lu]Ludotadipep
Small molecule	Recombinant protein	Solid tumor IL-2Rbγ				Genuv -
	Cancer	TPST2				GIST -
	Cancer	TRIM29				SPARK Biopharma, Inc SB24011
	Cancer	PIN1				Pimedbio, Inc PMB212
	NSCLC	EGFR mutation				Cyrus Therapeutics -
	NSCLC	GLS1				KRICT TRG-0039
	NSCLC	C797S mutation in EGFR				Bridge Biotherapeutics, Inc BBT-176
	Breast cancer	HER2				B2SBio, Inc BTS-A, B
	TNBC	HDAC6/8 dual-inhibitor				Sookmyung Women's University -
	TNBC	Mps1				Voronoi, Inc VRN081569
TNBC	TRIB2				GENESEN Co., Ltd -	



ONCOLOGY

Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
Small molecule	CML, AML HMGCLL1					Samsung Medical Center -
	CML BTK (C481S)					Medytox, Inc -
	AML PIM Kinase					Jeil Pharmaceutical Co., Ltd JPC-089
	Lung cancer p53 or USE1					KRICT -
	Metastatic colorectal cancer USP21					Daegu Gyeongbuk Medical Innovation Foundation -
	Malignant tumor EZH1/2					Hanmi Pharmaceutical Co., Ltd HM97662
	Prostate cancer Prostate-Specific Membrane Antigen					CellBion Co., Ltd PSMA-DGUL




CARDIOVASCULAR

Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
Oligonucleotide	Acute heart failure miRNA (miR-A, 12803p, 34a-5p, B, 203a-3p)					StemMediTech, Inc ANT-A/B
pDNA-micoparticle conjugate	Peripheral arterial disease, Diabetic peripheral neuropathy c-Met receptor					G&P Bioscience Co., Ltd GB107
Peptide	Pulmonary hypertension PP1					NadianBio Co., Ltd WK7003
Small molecule	Congestive heart failure, Chronic renal disease pendrin					Yonsei University A4948
	Aortic Stenosis DPP-4					REDNVIA Co., Ltd Evogliptin










GASTROINTESTINAL DISEASE

Drug class	Indication	Stage				Company
	Targets	Dis	PreClin	PhI	PhII	Product Code
Small molecule	Dyspepsia Ghrelin receptor					Kyungpook National University KARI101,201
	Ulcerative colitis PYGL [Glycogen phosphorylase] inhibitor					Innovo Therapeutics Inc. BJ-80F















RESPIRATORY DISEASE

Drug class	Indication	Stage				Company
	Targets	Dis	PreClin	PhI	PhII	Product Code
Antibodies	Pulmonary emphysema Robo1					Asan Medical Center -
Small molecule	Pneumonia Foxj1					Chongnam National University -
	COPD BLT2					Korea University LMT-1013

CNS DISEASE

Drug class	Indication	Stage				Company
	Targets	Dis	PreClin	PhI	PhII	Product Code
Antibodies	Multiple Sclerosis CD40					PB Immunotherapeutics PB-40N
ASO	Refractory epilepsy eIF4E Suppressor					SoVarGen, Inc SVG102_N075, SVG102_N182
Exosome	Parkinson's disease Parkin, PGC-1 α					Sungkyunkwan University -
Peptide	Parkinson's disease LRRK2					Whan In Pharmaceutical Co., Ltd -
RNA-AAV	Rett syndrome MeCP2					Rznomics, Inc -
Small molecule	Major depressive disorder α 2 adrenergic, NDRI					Kyung Hee University -
	Parkinson's disease α -synuclein					Hanyang University -
	Parkinson's disease ASK1					KRICT -
	Progressive supranuclear palsy 4R Tau Oligomers					KIST DTC0148





METABOLIC DISORDERS

Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
AAV-based gene therapy	NASH CR-P1					Curogen Co., Ltd CR-G001
Antibodies	NASH Resistin, CAP1 binding inhibitor					Seoul National University Hospital -
	Congenital hyperinsulinism glucagon					Hanmi Pharmaceutical Co., Ltd HM15136
Peptide+ shRNA plasmid	Obesity FABP4, FABP5					Hanyang University -
Recombinant protein	Acromegaly hGH receptor					Alteogen, Inc ALT-B5
	NASH FGF21, GLP-1, GCG, α -cytokine					Onogene Biotechnology, Inc OGB21502
Small molecule	Cirrhosis SMS1					Seoul National University -
	Diabetes SGLT1/2					Jeil Pharmaceutical Co., Ltd JP-2266
	Diabetes PPAR γ /AMPA dual agonist					Seoul National University Hospital -
	Diabetes, Obesity atypical PKC subtype					Yonsei University -
	Type II Diabetes PAK4					Jeonbuk National University ND201651
	Obesity IP6K					KAIST -
	NASH MLKL					Hanyang University -
	NASH USP1					Yonsei University WUX11










**IMMUNOLOGY**

Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
Macromolecule	Ischemia reperfusion injury ROS					Bilix Co., Ltd Brixelle (PEGylated bilirubin 3a)
Nanoparticles	Psoriasis, Contact dermatitis Hyaluronic acid					Ajou University -
Peptide	Atopic dermatitis FPR2					Novacell Technology, Inc NCP112
	Atopic dermatitis EGR1					Konkuk University -
	Atopic dermatitis STAT3					C&C Research Laboratories AD-1045
	Psoriasis CR-E1					Curogen Co., Ltd CR-PSZ
	Psoriasis, NASH NLRP3					Ajou University -
Small molecule	Psoriasis, Rheumatoid Arthritis Tyk2					Crystal Genomics, Inc -
	Systemic Sclerosis SOS1/RAS					Kyungpook National University -
	Asthma IL-33					Azcuris Co., Ltd KB1518
	IPF CHIT1(Chitotriosidase)					Innovo Therapeutics, Inc INV-005
	IPF, NASH PKM2					Lmito Therapeutics LMT-3833

OPHTHALMOLOGY

Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
CRISPR pegRNAs	Leber congenital amaurosis CEP290					Seoul National University -
	Age-related macular degeneration PDK4					Kyungpook National University -
Small molecule	Diabetic retinopathy TGase2					Daegu Gyeongbuk Medical Innovation Foundation -
	Diabetic retinopathy TRAP1					SmartinBio, Inc -

OTHERS

Drug class	Indication Targets	Stage				Company Product Code
		Dis	PreClin	PhI	PhII	
Antibodies	Osteoporosis Cathepsin K					Ewha Womans University -
	Paroxysmal nocturnal hemoglobinuria C5 Inhibitor					ImmunAbs, Inc IM-101
Bispecific	Organ Failure ABO BCR, CD3					KAIST -
MRI contrast agent	MRI contrast agent Gadolinium-based contrast agents (D03A-tranexamic acid conjugated)					Hana Pharm Co., Ltd HNP-2006
Peptide	Sarcopenia TLQP21					Asan Medical Center -
	Achondroplasia NPR-B					Peptron, Inc PND3174
miRNA	Sarcopenia Atrogin-1					Aventi, Inc AVTM201
Small molecule	Hearing loss DRAK1, ADCK4, CDC42BPA kinase					Kyungpook National University KPLO-2004
	Genetic Hearing Loss KV7.4					Yonsei University -



Website www.kddf.org/en **Contact** kddf_bd@kddf.org **TEL** +82-2-6379-3050
Address 9F KPX building, 137 Mapodaero, Mapo-gu, Seoul, 04143, Korea