

# AFM-TELETHON PIPELINE

## of clinical trials

### Clinical trials (ongoing or in preparation)

	DISEASES	TYPE OF THERAPY	PRODUCT	PHASE	
NEUROMUSCULAR DISORDERS	Spinal muscular atrophy with progressive myoclonic epilepsy (SMA-PME) and Farber disease	GT	AAV-ASA1	Preclinical	
		GT	AAV-microdystrophin	Phase I/II/III	
	Duchenne muscular dystrophy	P	Sarconeos (BIO101)	Phase I/II (in preparation)	
		P	Tamoxifen	Phase III*	
	LGMD R1 (calpain)	GT	AAV-CAPN3	Preclinical	
	LGMD R3 ( $\alpha$ -sarcoglycan)	P	Givinostat	Preclinical	
	LGMD R5 ( $\gamma$ -sarcoglycan)	GT	AAV-SGCG	Preclinical	
		P	Givinostat	Preclinical	
	LGMD R9 (FKRP)	GT	AAV-FKRP	Phase I/II	
	Myotonic dystrophy type 1 (Steinert)	GT	AAV-MBNLΔ	Preclinical	
OTHER DISEASES	Type 3 glycogenosis (Cori-Forbes disease)	TG	AAV-GDE	Preclinical	
	Charcot-Marie-Tooth disease	P	PXT3003	Phase III*	
		P	IFB-088	Phase I completed	
	Pompe disease	GT	AAV-GAA	Phase I/II	
	Myotubular myopathy	GT	AAV-MTM	Phase I/II*	
	Inclusion body myositis	P	Rapamycin	Phase III*	
	Sarcopenia	P	recGDF5	Preclinical	
	Amyotrophic lateral sclerosis	GT	AAV-SOD1	Preclinical	
		GT	AAV-C9	Preclinical	
		P	Anti-CD38	Preclinical	
		P	IFB-088	Phase II	
		P	Interleukin 2	Phase IIb	
	Fanconi anemia	GT	Hematopoietic stem cells + LV-FANCA	Phase I/II*	
	Immune deficiencies	Artemis deficiency	GT	Hematopoietic stem cells + LV-Artemis	Phase I/II
		X-linked severe combined immunodeficiency (X-SCID)	GT	Hematopoietic stem cells + LV-XSCID	Phase I/II*
		Chronic granulomatosis	GT	Hematopoietic stem cells + LV-CGD	Follow-up study (15 years) Phase I/II USA
		Wiskott-Aldrich syndrome	GT	Hematopoietic stem cells + LV-WAS	Follow-up study (15 years)
	Dystrophic epidermolysis bullosa	GT	Genetically modified autologous skin cells	Phase I/II*	
	Junctional epidermolysis bullosa	GT	Genetically modified autologous skin cells	Pilot study*	
	Glycogen storage disease type 1a (Von Gierke disease)	GT	AAV-G6PC	Preclinical	
	Disseminated Lupus Erythematosus	CT	Mesenchymal stem cells	Phase I/II	
	Crigler-Najjar disease	GT	AAV-UGT1A1	Phase III (confirmatory study)	
		CT	Embryonic stem cells	Phase I/II	
		GT	AAV-RdCVF	Preclinical	
	Retinitis pigmentosa	CT	Cytotoxic T cells	Phase I	
	Multiple sclerosis	CT	Lithium	Phase III	
	Phelan-McDermid syndrome (genetic form of autism)	P	Valproic acid	Phase II	
	Wolfram syndrome	P	Embryonic stem cells	Preclinical	
	Sickle cell skin ulcers	CT			

GT

Gene therapy

CT

Cell therapy

P

Pharmacology

\* Preclinical or previous clinical phases funded by AFM-Telethon

### Approved drugs

**Cuprior® P**

Wilson disease

**Firdapse® P**

Lambert-Eaton syndrome

**Namuscla® P**

Myotonic syndromes

**Skysona® TG**

Adrenoleucodystrophy

**Strimvelis® TG**

X-SCID

**Zynteglo® TG** $\beta$ -thalassemia**Zolgensma® TG**

Spinal muscular atrophy

### Off-label drugs

**Lumevoq® TG**

Leber optic neuropathy

**Metformin P**

Steinert myotonic dystrophy

### Patient databases

- 13 patients databases

- 16,000 neuromuscular disease patients