

AFM-TELETHON PIPELINE of clinical trials

Clinical trials (ongoing or in preparation)

NEUROMUSCULAR DISEASES	DISEASES	TYPE OF THERAPY	PRODUCT	PHASE
	Spinal muscular atrophy with progressive myoclonic epilepsy (SMA-PME) and Farber disease	GT	AAV-ASAH1	Preclinical
	Duchenne muscular dystrophy	GT	AAV-microdystrophin (GNT0004)	Phase I/II/III
	LGMD R1 (calpain)	GT	AAV-CAPN3	Preclinical
	LGMD R2 (dysferlin)	P	Bazedoxifen	Preclinical
	LGMD R3 (α -sarcoglycan)	P	Givinostat	Preclinical
	LGMD R5 (γ -sarcoglycan)	GT	AAV-SGCG (ATA-200)	Phase I/II
		P	Givinostat	Preclinical
	LGMD R9 (FKRP)	GT	AAV-FKRP (ATA-100)	Phase I/II
	Myotonic dystrophy type 1 (Steinert)	GT	AAV-MBNL Δ	Preclinical
		GT	Tricyclo -DM1	Preclinical
	Type 3 glycogenosis (Cori-Forbes disease)	GT	AAV-GDE	Preclinical
	Charcot-Marie-Tooth disease	P	IFB-088	Phase I completed
	Myotubular myopathy	GT	AAV-MTM	Phase I/II*
	Inclusion body myositis	P	Rapamycin (Sirolimus)	Phase III
		P	Ruxolitinib	Phase II* in preparation
		P	recGDF5	Preclinical
	Sarcopenia	P	recGDF5	Preclinical
	Amyotrophic lateral sclerosis	GT	AAV-SOD1	Preclinical
		P	IFB-088	Phase II
		P	Interleukin 2	Phase IIb

Approved drugs

Cuprior® **P**
Wilson disease

Firdapse® **P**
Lambert-Eaton syndrome

Namuscla® **P**
Myotonic syndromes

Skysona® **TG**
Adrenoleukodystrophy

Strimvelis® **TG**
X-SCID

Zynteglo® **TG** (USA)
 β -thalassemia

Zolgensma® **TG**
Spinal muscular atrophy

Off-label drugs

Lumevoq® **TG**
Leber optic neuropathy

Metformin **P**
Steinert myotonic dystrophy

OTHER DISEASES	DISEASES		TYPE OF THERAPY	PRODUCT	PHASE
	Fanconi anemia		GT	Hematopoietic stem cells + LV-FANCA	AMM submission
	Spinocerebellar ataxia 3 (SCA3)		GT	AOM-skipex10	Preclinical
	Dilated cardiomyopathy		CT	extracellular vesicle-enriched secretome of cardiovascular progenitor cells	Phase I*
	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
	Metachromatic leukodystrophy		GT	ARSA	Preclinical
	Crigler-Najjar disease		GT	AAV-UGT1A1	Phase III confirmatory
			GT	IDES + AAVUGT1A1	Phase II
	Retinitis pigmentosa		CT	Embryonic stem cells	Phase I/II
			GT	AAV-RdCVF	Phase I/II
	Multiple sclerosis		CT	Cytotoxic T cells	Phase I
	Dravet Syndrome		GT	CAV2	Preclinical
	Phelan-McDermid syndrome (genetic form of autism)		P	Lithium	Phase III*
	Wolfram Syndrome		P	Valproic acid	Phase II
	Sickle cell skin ulcers		CT	Embryonic stem cells	Preclinical
	Sickle cell disease		GT	LV- β AS3	Preclinical

Patient databases

The AFM-Telethon supports **research databases** that collect medical data of neuromuscular diseases patients. In 2023, it created **a health data warehouse**.

GT Gene therapy

CT Cell therapy

P Pharmacology

* Preclinical or previous clinical phases funded by AFM-Telethon