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Supplemental information

Guidelines for mitochondrial RNA analysis

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Table S1. Summary of miRNAs targeting mitochondrial genes.

miRNA	Origin	Mitochondrial gene	Reference
hsa-miR-mit3, hsa-miR-mit6, and hsa-miR-mit4	Mitochondria	MT-RNR1 (12S rRNA) and MT-RNR2 (16S rRNA)	[1]
hsa-miR-mit3, hsa-miR-mit3, and hsa-miR-mit4	Mitochondria	MT-ATP6 MT-CO3	[1]
mitomiR-2392	Mitochondria	MT-ND2, MT-ND4, MT-ND5, MT-CYB and MT-CO1	[2]
hsa-miR-338	Nucleus	COXIV and ATP5G1	[3]
hsa-miR-146a	Nucleus	16S rRNA, MT-ND1, MT-ND2, MT-ND4, MT-ND5, MT-ND6 and MT-CYB	[4]
hsa-miR-26b, hsa-miR-100, and hsa-miR-143	Nucleus	MT-CO2	[5]
hsa-miR-181c	Nucleus	MT-CO1	[6]

Table S2. FDA-approved RNA-based drugs.

Therapeutic area	Company	Candidate	Modality	Target	Indication
Cardiovascular	Alnylam + Novartis	Leqvio (Inclisiran)	RNAi	Proprotein convertase subtilisin/kexin type 9	Atherosclerosis
	Alnylam + Roche	Zelebesiran	RNAi	Angiotensinogen	Hypertension
Renal	Alnylam	Oxlumo (Lumasiran)	RNAi	Glycolate oxidase	Primary hyperoxaluria type I
Hepatology	Alnylam	Gocsiran	RNAi	5'-amino-levulinate synthase 1	Acute hepatic porphyria
Neuromuscular	NS Pharma	Viltepso (Vitolarsen)	ASO	Dystrophin exon 53	Duchene muscular dystrophy

	Serepta	Exondys 51(eteplirsen)	PMO	Dystrophin exon 51	Duchene muscular dystrophy
Neurology	Alnylam Ionis + PTC	Onpattro (patirsiran) & Amvuttra (vutrisiran) Tegesedi (inotersen)	RNAi ASO	Transthyretin	hATTR Amyloidosis-PN
	Biogen + Ionis	Qaisody (tofersen)	ASO	Superoxide dismutase type 1	SOD-1 Amyotrophic Lateral Sclerosis
Infectious diseases	Moderna	Spikevax (mRNA-1273)	mRNA		Covid-19 vaccine
	Pfizer +BioNTech	Comirnaty	mRNA		Covid-19 vaccine

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