

Overview of all **duplications** (reported in the Leiden DMD mutation database) for which the reading frame can theoretically be restored by AON-mediated exon skipping

Mutation ¹	Phenotype	Exon to skip ²	Mutation	Phenotype	Exon to skip
Exon 2 (9) ³	DMD	2 ⁴	Exon 18 (1)	DMD	18
Exon 2-6 (1)	BMD	2-6	Exon 18-19 (1)	BMD	18-19
Exon 2-7 (4)	1 DMD,3 BMD	2-7	Exon 18-23 (1)	DMD	18-23
Exon 2-9 (1)	DMD	2-9	Exon 18-32 (1)	DMD	18-32
Exon 2-11 (1)	DMD	2-11	Exon 18-52 (1)	BMD	18-52
Exon 2-21 (1)	DMD	2-21	Exon 20 (1)	DMD	20
Exon 3 (1)	DMD	3	Exon 20-27 (1)	DMD	20-27
Exon 3-4 (3)	2 DMD,1 IMD	3-4	Exon 20-41 (2)	1 IDB,1 BMD	20-41
Exon 3-5 (1)	DMD	3-5	Exon 22-25 (2)	DMD	22-25
Exon 3-7 (6)	DMD	3-7	Exon 22-27 (1)	BMD	22-27
Exon 3-8 (2)	1 DMD,1 BMD	3-8	Exon 37-43 (1)	DMD	37-43
Exon 3-11 (1)	DMD	3-11	Exon 37-44 (1)	DMD	37-44
Exon 3-12 (1)	BMD	3-12	Exon 38-43 (1)	DMD	38-43
Exon 3-13 (1)	DMD	3-13	Exon 38-44 (1)	DMD	38-44
Exon 3-17 (1)	DMD	3-17	Exon 42-43 (1)	DMD	42-43
Exon 3-30 (1)	DMD	3-30	Exon 42-52 (1)	DMD	42-52
Exon 4-8 (1)	DMD	4-8	Exon 43 (2)	DMD	43
Exon 4-10 (1)	DMD	4-10	Exon 44 (3)	DMD	44
Exon 5 (1)	BMD	5	Exon 44-56 (1)	DMD	44-56
Exon 5-6 (1)	DMD	5-6	Exon 44-57 (1)	DMD	44-57
Exon 5-7 (2)	DMD	5-7	Exon 45 (1)	DMD	45
Exon 6 (6)	DMD	6	Exon 45-50 (1)	DMD	45-50
Exon 6-7 (2)	DMD	6-7	Exon 45-51 (1)	DMD	45-51
Exon 6-8 (1)	DMD	6-8	Exon 45-52 (1)	DMD	45-52
Exon 7-8 (1)	DMD	7-8	Exon 46-47 (1)	DMD	46-47
Exon 7-9 (1)	DMD	7-9	Exon 46-60 (1)	DMD	46-60
Exon 7-20 (1)	DMD	7-20	Exon 47 (1)	DMD	47
Exon 8 (1)	DMD	8	Exon 48 (1)	DMD	48
Exon 8-9 (5)	DMD	8-9	Exon 48-52 (1)	DMD	48-52
Exon 8-13 (2)	DMD	8-13	Exon 48-60 (1)	DMD	48-60
Exon 8-29 (1)	DMD	8-29	Exon 49-60 (1)	DMD	49-60
Exon 9-12 (1)	DMD	9-12	Exon 50 (2)	1 DMD,1 BMD	50
Exon 9-14 (1)	DMD	9-14	Exon 50-52 (2)	DMD	50-52
Exon 9-16 (1)	DMD	9-16	Exon 50-55 (1)	DMD	50-55
Exon 10-11 (1)	DMD	10-11	Exon 51 (6)	DMD	51
Exon 12 (1)	DMD	12	Exon 51-55 (2)	DMD	51-55
Exon 12-13 (2)	DMD	12-13	Exon 51-57 (1)	DMD	51-57
Exon 13-19 (1)	DMD	13-19	Exon 52 (1)	DMD	52
Exon 13-20 (1)	DMD	13-20	Exon 52-55 (1)	DMD	52-55
Exon 13-42 (1)	BMD	13-42	Exon 53 (1)	DMD	53
Exon 14-18 (1)	BMD	14-18	Exon 53-55 (1)	DMD	53-55
Exon 14-21 (1)	DMD	14-21	Exon 54 (1)	DMD	54
Exon 14-26 (1)	BMD	14-26	Exon 56 (1)	DMD	56
Exon 14-36 (1)	BMD	14-36	Exon 56-61 (1)	DMD	56-61
Exon 14-42 (1)	BMD	14-42	Exon 58-59 (1)	DMD	58-59
Exon 15-18 (1)	DMD	15-18	Exon 58-63 (1)	DMD	58-63
Exon 15-28 (1)	BMD	15-28	Exon 61 (1)	DMD	61
Exon 16-34 (2)	BMD	16-34	Exon 61-64 (1)	DMD	61-64
Exon 17 (1)	DMD	17			
Exon 17-28 (1)	BMD	17-28			
Exon 17-39 (1)	BMD	17-39			

¹Mutation data as present in the Leiden DMD mutation database on March ... 2004 kindly provided by Ivo Fokkema

²Exon(s) to skip in order to convert the deletion into its nearest in frame counterpart

³Absolute numbers are shown in brackets; in the Leiden DMD mutation database 157 duplications and x mutations have been reported for DMD patients (data kindly provided by Ivo Fokkema)

⁴Duplications that require skipping of exons that has been proven "skippable" in human control myotubes are shown in blue.