

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

Deletion ¹ (n) ²	Exon(s) to skip ³
Exon 2-11 (1)	12-19
Exon 2-13 (2)	14-19
Exon 2-18 (1)	19
Exon 2-20 (2)	21
Exon 2-25 (2)	26-50
Exon 2-27 (1)	28-50
Exon 2-30 (1)	31-50
Exon 2-33 (1)	34-50
Exon 2-44 (1)	45-50
Exon 3-7 (24)	2 or 8 ⁴
Exon 3-11 (3)	12
Exon 3-17 (5)	18
Exon 3-19 (4)	20
Exon 3-21 (1)	22
Exon 3-43 (1)	44
Exon 4-6 (2)	7&8
Exon 4-7 (3)	8
Exon 4-19 (3)	20
Exon 5-6 (2)	7&8
Exon 5-7 (4)	8
Exon 5-11 (1)	12
Exon 5-21 (1)	22
Exon 5-43 (1)	44
Exon 6 (2)	7&8
Exon 6-7 (10)	8
Exon 6-17 (2)	18
Exon 6-43 (1)	44
Exon 7 (2)	6&8
Exon 7-12 (2)	6
Exon 7-13 (1)	6
Exon 7-18 (1)	6
Exon 7-33 (1)	6
Exon 7-49 (1)	6
Exon 8 (2)	6&7
Exon 8-9 (14)	6&7
Exon 8-11 (9)	7
Exon 8-12 (2)	6&7
Exon 8-13 (1)	6&7
Exon 8-15 (2)	6&7
Exon 8-16 (8)	6&7
Exon 8-17 (6)	7
Exon 8-18 (1)	6&7
Exon 8-20 (4)	6&7
Exon 8-22 (1)	6&7
Exon 8-24 (1)	6&7
Exon 8-27 (1)	6&7
Exon 8-29 (1)	6&7
Exon 8-33 (2)	6&7
Exon 8-39 (1)	6&7
Exon 8-41 (3)	6&7
Exon 8-42 (2)	6&7
Exon 8-43 (2)	7
Exon 8-44 (4)	6&7
Exon 8-45 (2)	7

Deletion (n)	Exon(s) to skip
Exon 8-47 (1)	6&7
Exon 8-51 (1)	6&7
Exon 10-11 (4)	12
Exon 10-17 (3)	18
Exon 10-19 (1)	20
Exon 10-21 (1)	22
Exon 10-43 (1)	44
Exon 10-52 (1)	53
Exon 12 (2)	11
Exon 12-15 (2)	11
Exon 12-16 (3)	11
Exon 12-19 (1)	11&20
Exon 12-20 (1)	11
Exon 12-25 (1)	11
Exon 12-44 (3)	11
Exon 12-51 (1)	11
Exon 13-43 (1)	44
Exon 13-50 (1)	51
Exon 14-17 (3)	18
Exon 14-43 (1)	44
Exon 16-17 (1)	18
Exon 16-21 (1)	22
Exon 17 (4)	18
Exon 17-21 (1)	22
Exon 17-43 (1)	44
Exon 18 (2)	17
Exon 18-20 (2)	17
Exon 18-21 (1)	17&22
Exon 18-25 (1)	17
Exon 18-27 (2)	17
Exon 18-33 (2)	17
Exon 18-41 (1)	17
Exon 18-44 (4)	17
Exon 19-21 (1)	22
Exon 20 (1)	19 or 21
Exon 20-27 (1)	19
Exon 20-29 (1)	19
Exon 21 (5)	20 or 22
Exon 21-45 (1)	46
Exon 22-34 (1)	21
Exon 22-36 (1)	21
Exon 22-43 (1)	21&44
Exon 28-43 (2)	44
Exon 29-50 (1)	51
Exon 30-43 (2)	44
Exon 35-43 (1)	44
Exon 36-43 (1)	44
Exon 38-43 (1)	44
Exon 40-43 (3)	44
Exon 42-43 (7)	44
Exon 43 (5)	44
Exon 43-45 (5)	56
Exon 43-50 (6)	51
Exon 43-52 (1)	53

Deletion (n)	Exon(s) to skip
Exon 44 (57)	43 or 45
Exon 44-47 (6)	43
Exon 44-48 (2)	43
Exon 44-49 (1)	43
Exon 44-50 (2)	43&51
Exon 44-51 (6)	43
Exon 44-52 (5)	43&53 or 53&54
Exon 44-53 (1)	54
Exon 45 (92)	44 or 46
Exon 45-50 (78)	51
Exon 45-52 (35)	53
Exon 45-54 (17)	44 or 55
Exon 45-68 ⁵ (1)	44 or 69
Exon 46 (4)	45
Exon 46-47 (42)	45
Exon 46-48 (17)	45
Exon 46-49 (17)	45
Exon 46-50 (26)	45&51
Exon 46-51 (29)	45
Exon 46-52 (11)	45&53 or 53&54
Exon 46-53 (10)	45 or 54
Exon 46-55 (3)	45 or 56
Exon 46-60 (1)	45
Exon 47-50 (11)	51
Exon 47-52 (7)	53
Exon 47-54 (6)	46 or 55
Exon 47-56 (1)	46
Exon 48-50 (100)	51
Exon 48-52 (37)	53
Exon 48-54 (6)	55
Exon 48-61 (1)	46-47&62

Deletion (n)	Exon(s) to skip
Exon 49-50 (46)	51
Exon 49-52 (26)	53
Exon 49-54 (6)	55
Exon 49-62 (1)	46-48
Exon 50 (41)	51
Exon 50-52 (14)	53
Exon 51 (83)	50 or 52
Exon 51-53 (7)	50
Exon 51-54 (9)	50&55
Exon 51-55 (8)	50
Exon 51-56 (1)	50&57
Exon 51-57 (1)	50 or 58
Exon 52 (25)	51 or 53
Exon 52-54 (1)	55
Exon 52-63 (1)	51
Exon 53 (8)	52
Exon 53-54 (6)	52&55
Exon 53-55 (2)	52
Exon 53-59 (1)	52
Exon 53-60 (1)	52
Exon 54 (2)	55
Exon 54-62 (1)	53&63
Exon 55 (2)	54 or 56
Exon 56 (2)	55 or 57
Exon 57 (2)	56
Exon 57-60 (1)	56
Exon 60-62 (1)	59&63
Exon 61 (1)	59&60
Exon 64-67 ⁵ (1)	63&68
Exon 65-74 ⁵ (1)	75

¹Mutation data as present in the Leiden DMD mutations database on February 23rd 2004 kindly provided by Ivo Fokkema

² n is the number of times this mutation has been reported in the Leiden DMD mutation database (data kindly provided by Ivo Fokkema)

³Exon(s) to skip in order to convert the deletion into its nearest in frame counterpart

⁴Deletions that require skipping of exons that has been proven "skippable" in human control myotubes are shown in blue, deletions for which reading frame restoration has been shown feasible *in vitro* are depicted in green

⁵Since the cysteine rich region is deleted, restoring the reading frame is unlikely to result in a functional protein for these patients