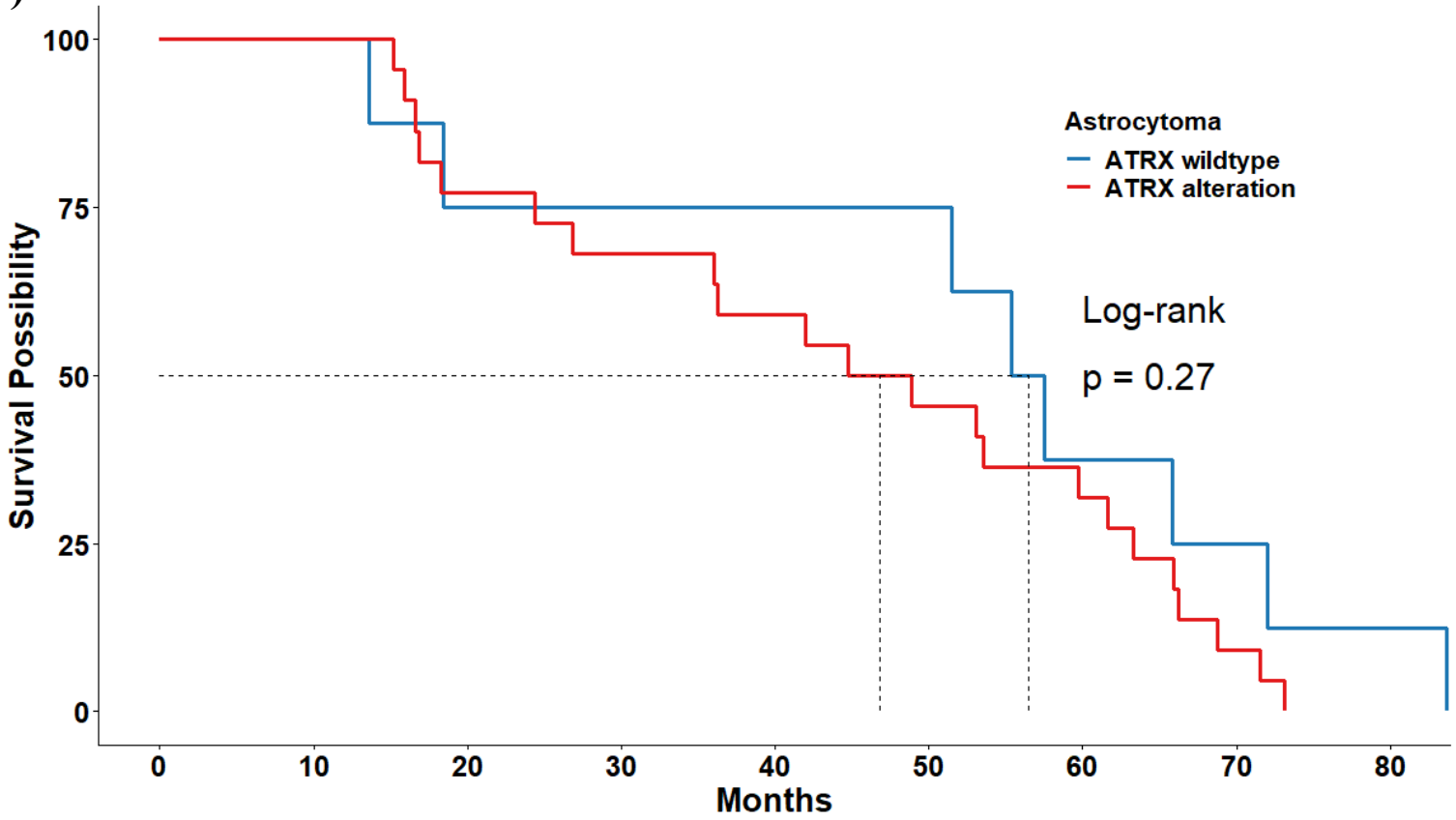
Supplement Figure 2. Kaplan–Meier curves showing no significant effects of certain genetic alterations on the overall survival of patients with astrocytoma (1-31). Since the numbers of patients divided into two groups (e.g. BRAF wildtype/BRAF alteration) using different parameters varied, we only enrolled the parameters using which the number of patients in either group was above 3. Parameters used in this section were shown as follows.

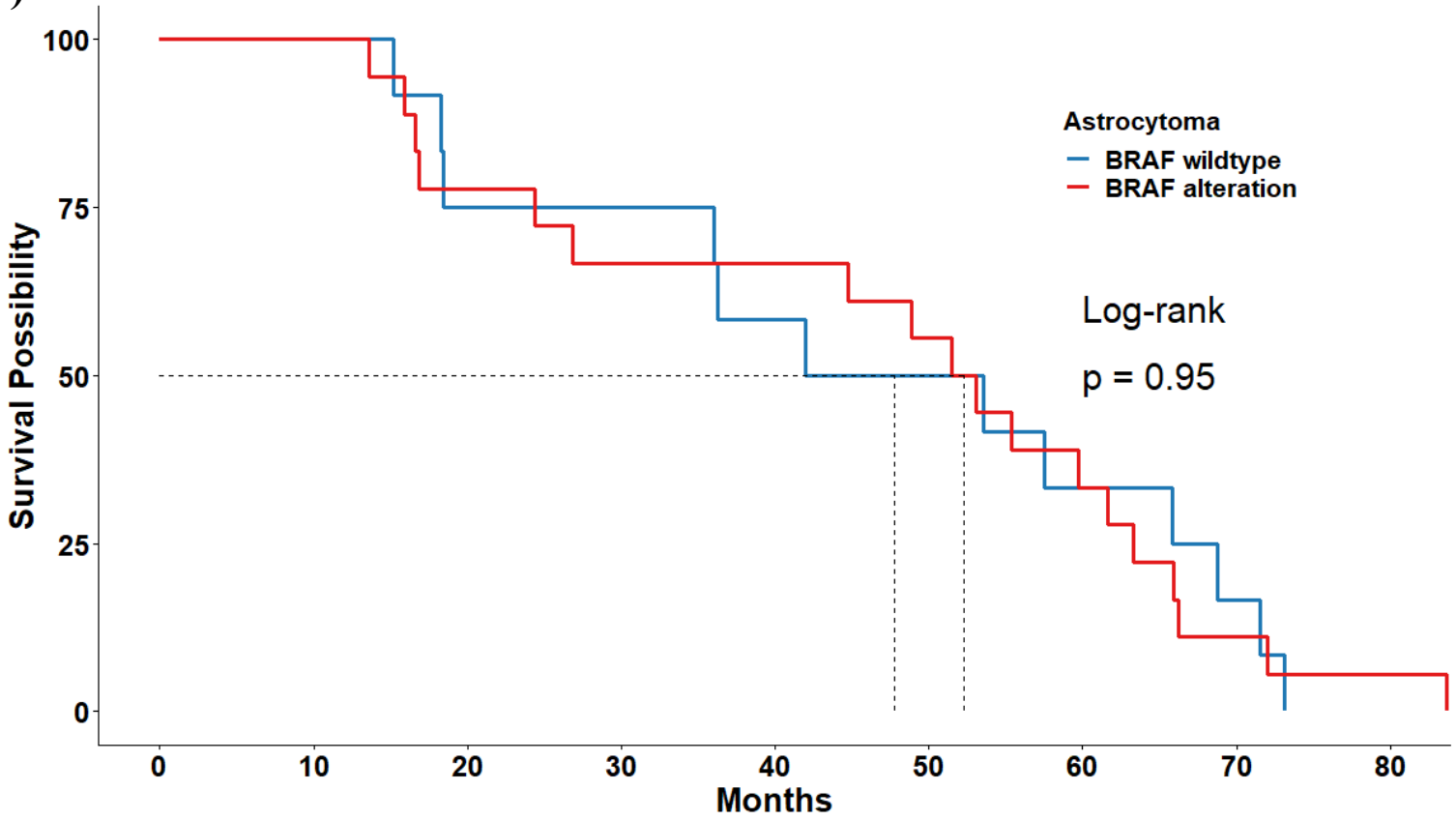
(1) ATRX 1
(2) BRAF 2
(3) CDK4 3
(4) CDK6 4
(5) CDKN2A 5
(6) CDKN2B 6
(7) CIC 7
(8) EGFR 8
(9) FGFR1 9
(10) FGFR2 10
(11) FGFR3 11
(12) KMT5B 12
(13) KRAS 13
(14) MYB 14
(15) MYBL1 15
(16) MYC 16
(17) MYCN 17
(18) NOTCH1 18
(19) NTRK2 19
(20) NTRK3 20
(21) PDGFRA 21
(22) PIK3CA 22
(23) PIK3R1 23
(24) PPM1D 24
(25) PTEN 25
(26) PTPN11 26
(27) RB1 27
(28) SMARCA4 28
(29) TOP3A 29
(30) TP53 30
(31) chr19q 31

(1)



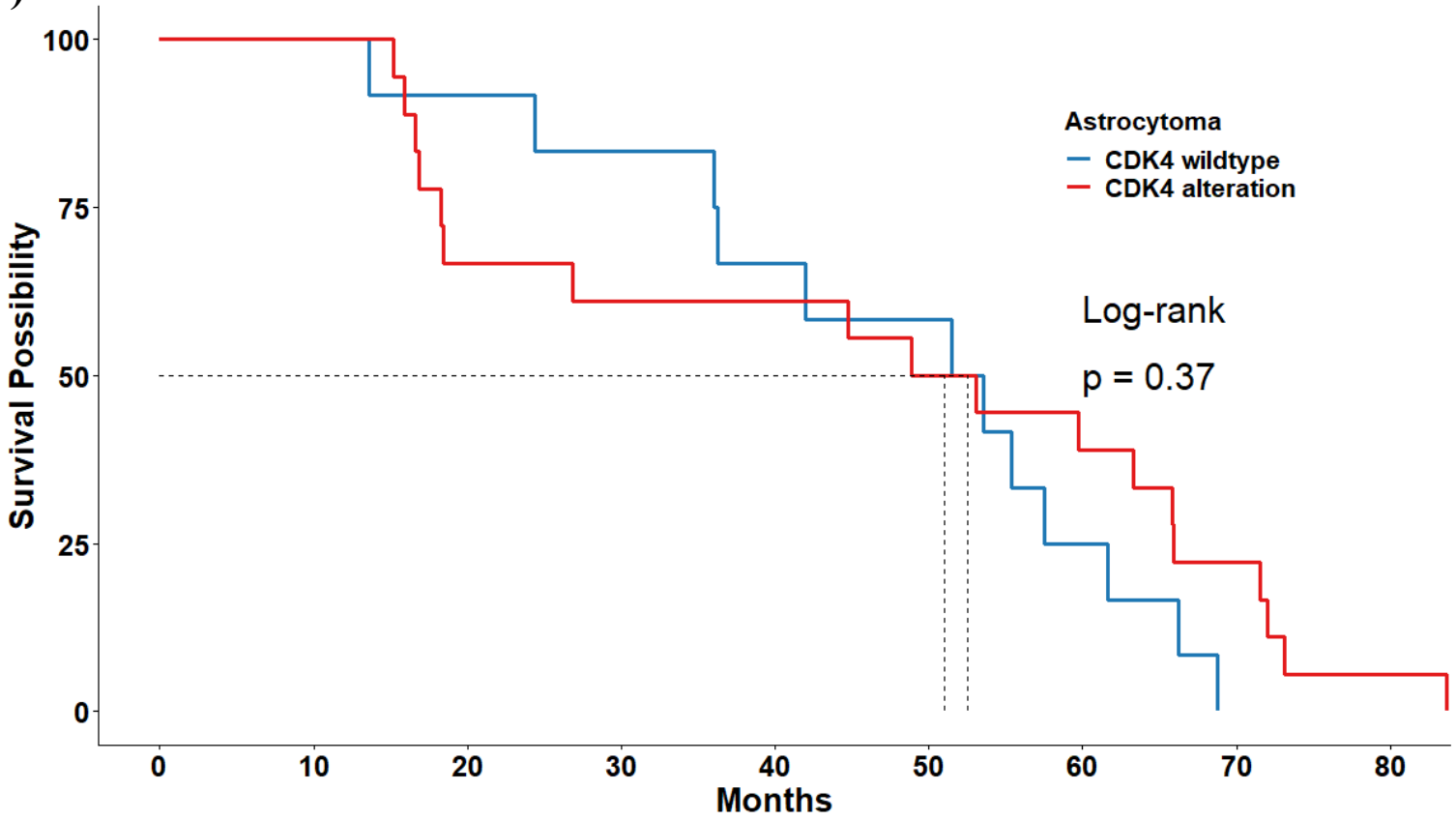
ATRX wildtype	8	8	6	6	6	6	3	2	1
ATRX alteration	22	22	17	15	13	10	7	2	0

(2)

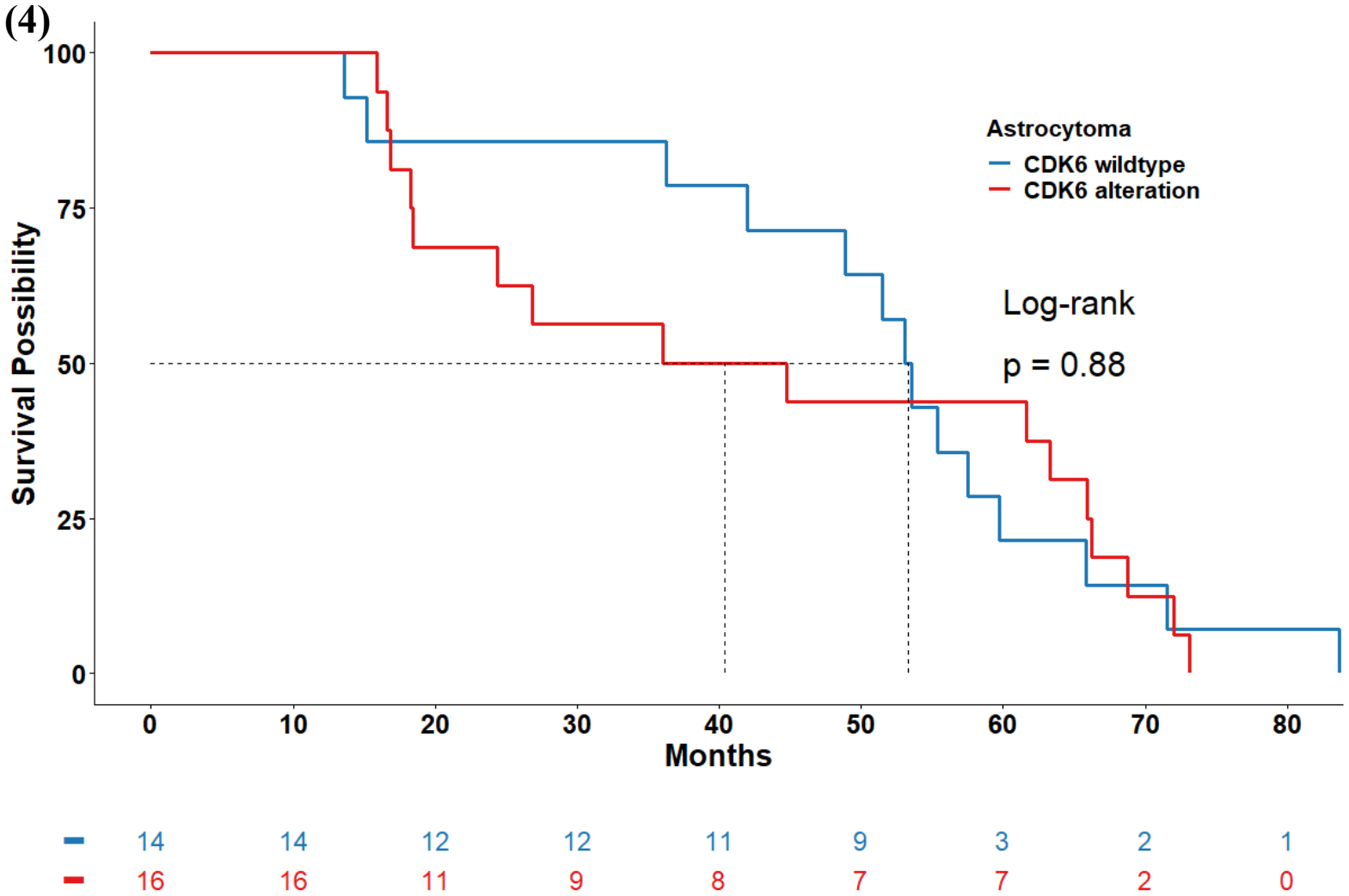


BRAF wildtype	12	12	9	9	7	6	4	2	0
BRAF alteration	18	18	14	12	12	10	6	2	1

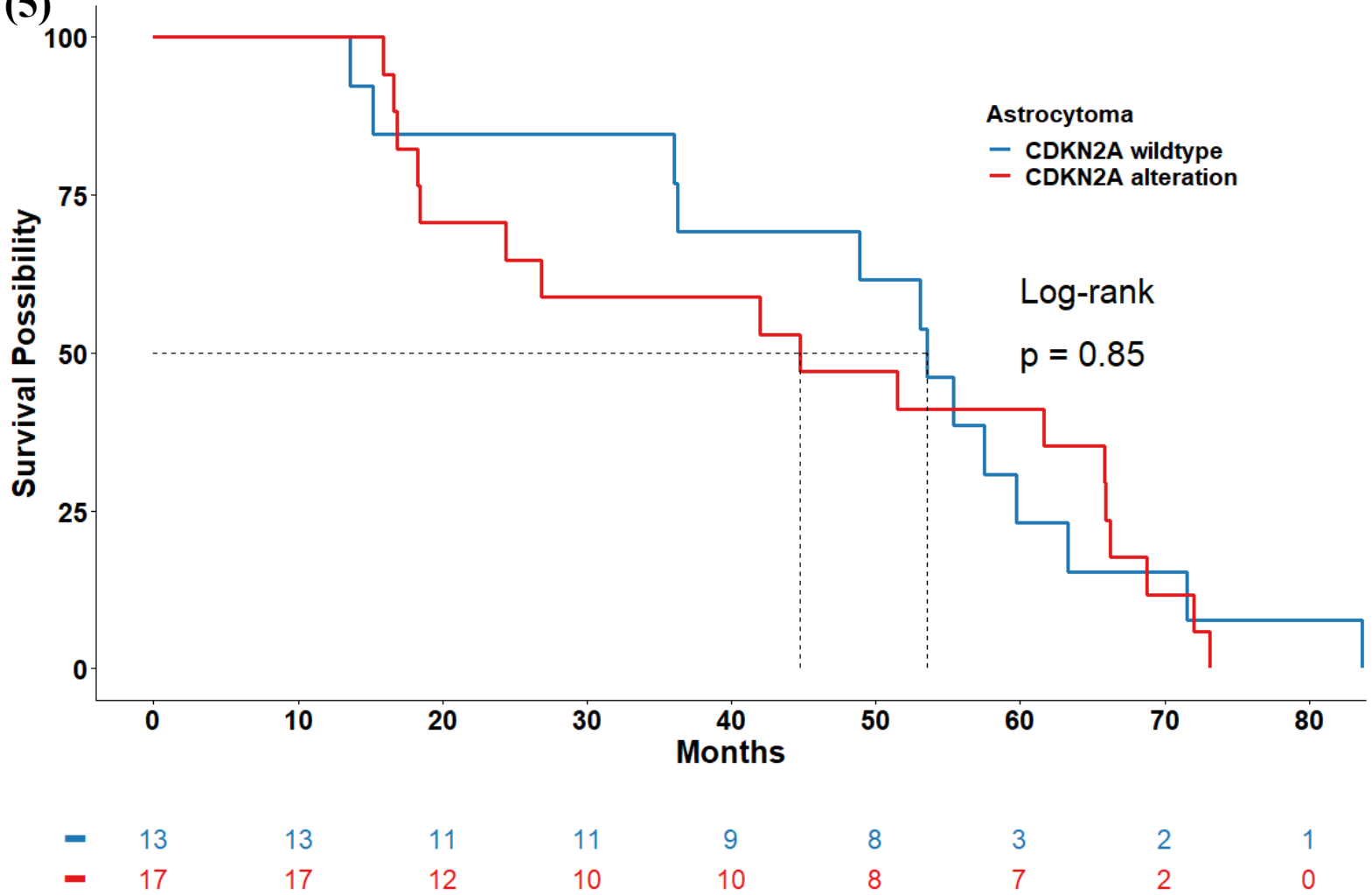
(3)



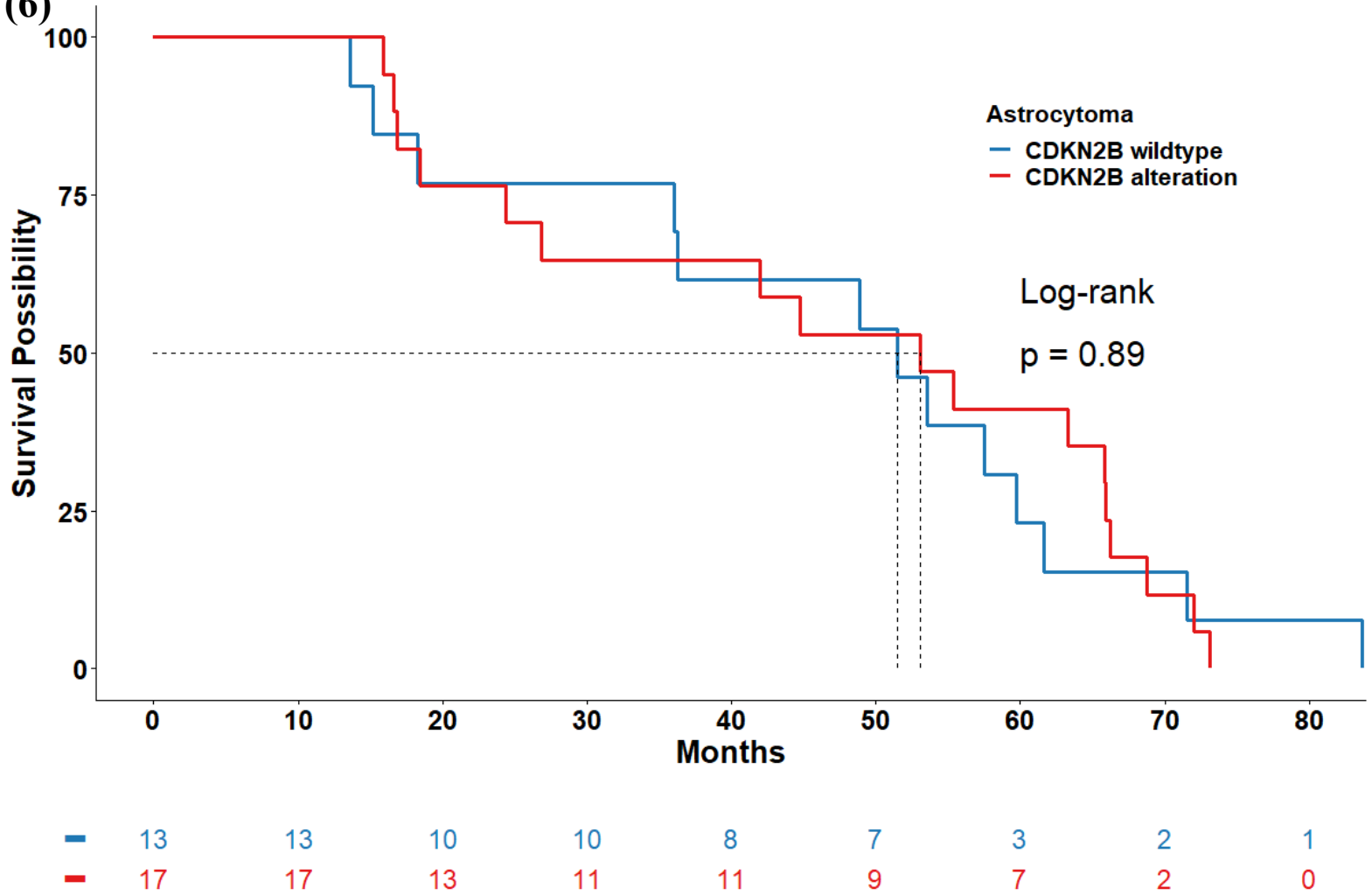
CDK4 wildtype	12	12	11	10	8	7	3	0	0
CDK4 alteration	18	18	12	11	11	9	7	4	1


(4)
Survival Possibility
100
75
50
25
0
Astrocytoma
CDK6 wildtype
CDK6 alteration
Log-rank
p = 0.88
0
10
20
30
40
50
60
70
80
Months
14 14 12 12 11 9 3 2 1
16 16 11 9 8 7 7 2 0

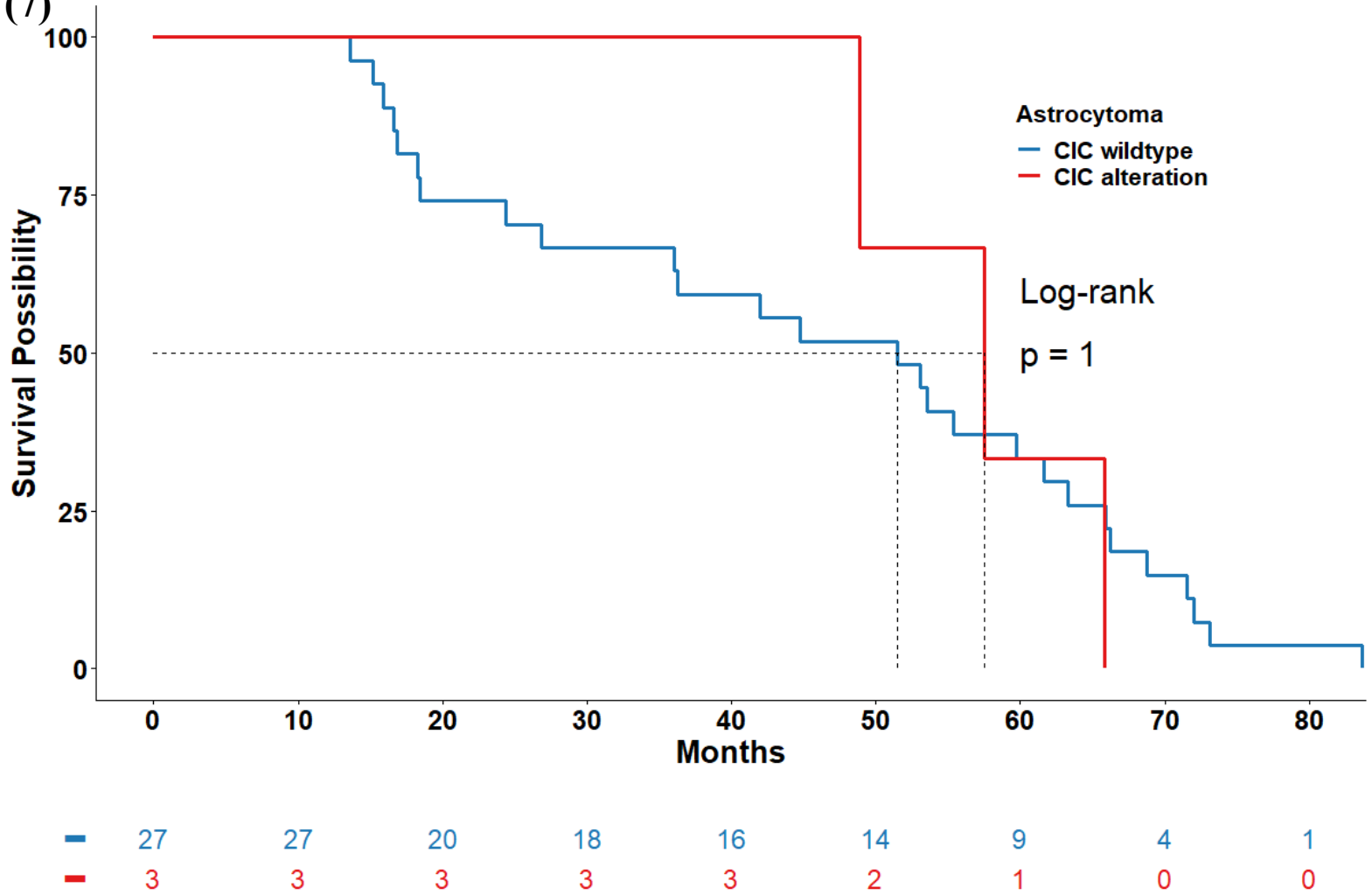
(5)


Astrocytoma
CDKN2A wildtype
CDKN2A alteration
Log-rank
p = 0.85
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
13 13 11 11 9 8 3 2 1
17 17 12 10 10 8 7 2 0

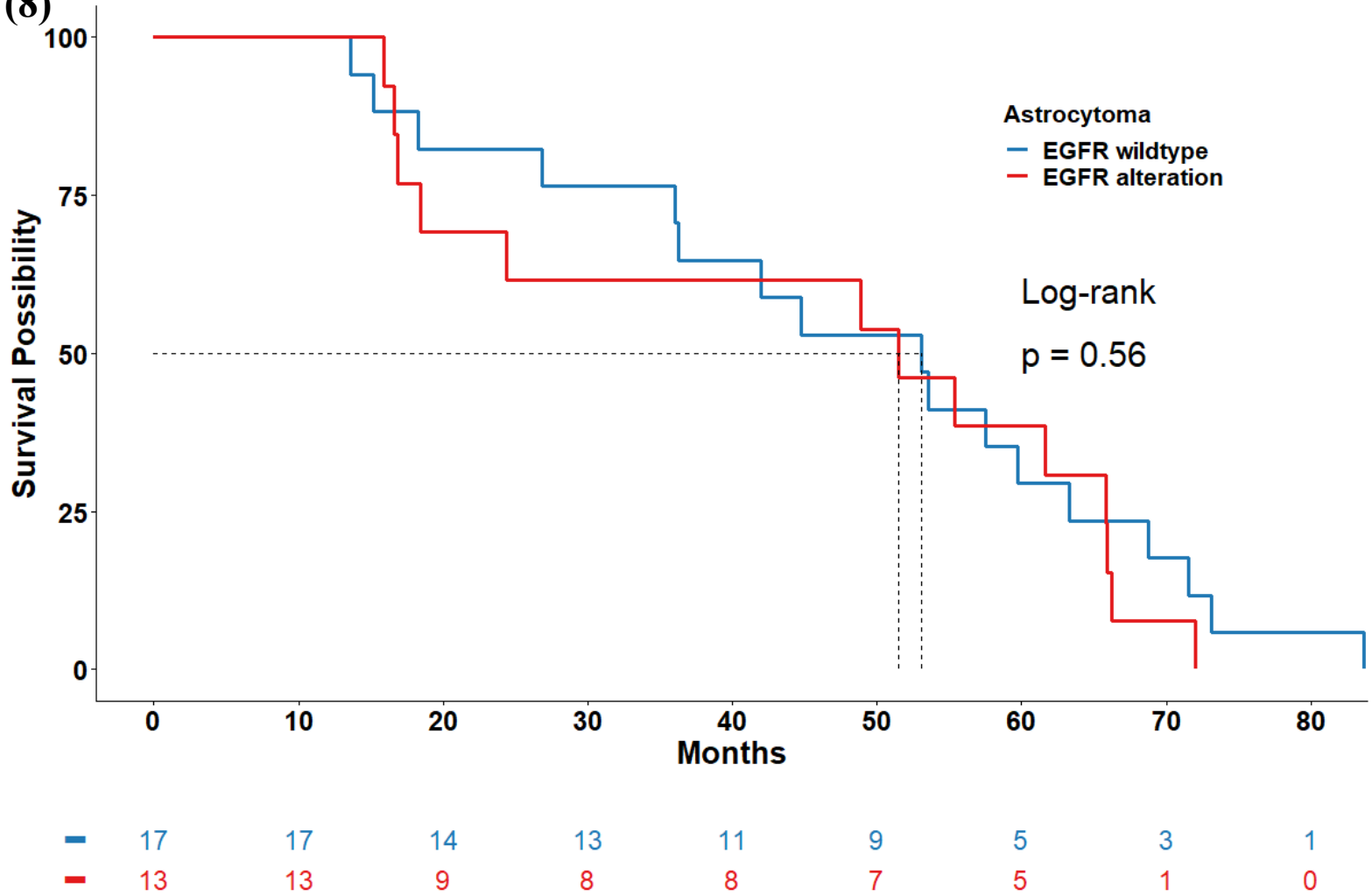
(6)


Astrocytoma
CDKN2B wildtype
CDKN2B alteration
Log-rank
p = 0.89
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
13 13 10 10 8 7 3 2 1
17 17 13 11 11 9 7 2 0

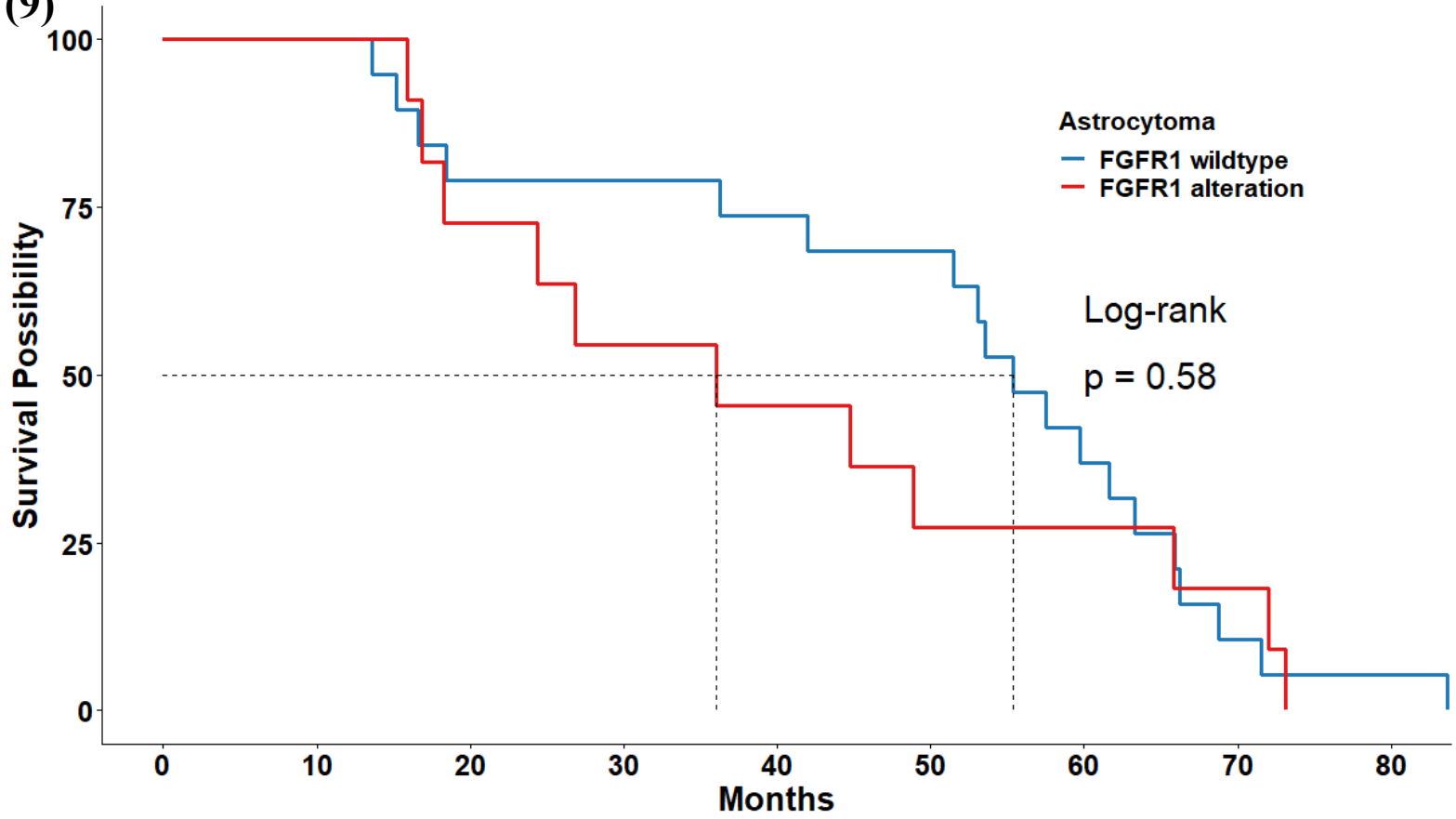
(7)


Survival Possibility
100
75
50
25
0
Astrocytoma
CIC wildtype
CIC alteration
Log-rank
p = 1
0
10
20
30
40
50
60
70
80
Months
27 27 20 18 16 14 9 4 1
3 3 3 3 3 2 1 0 0

(8)

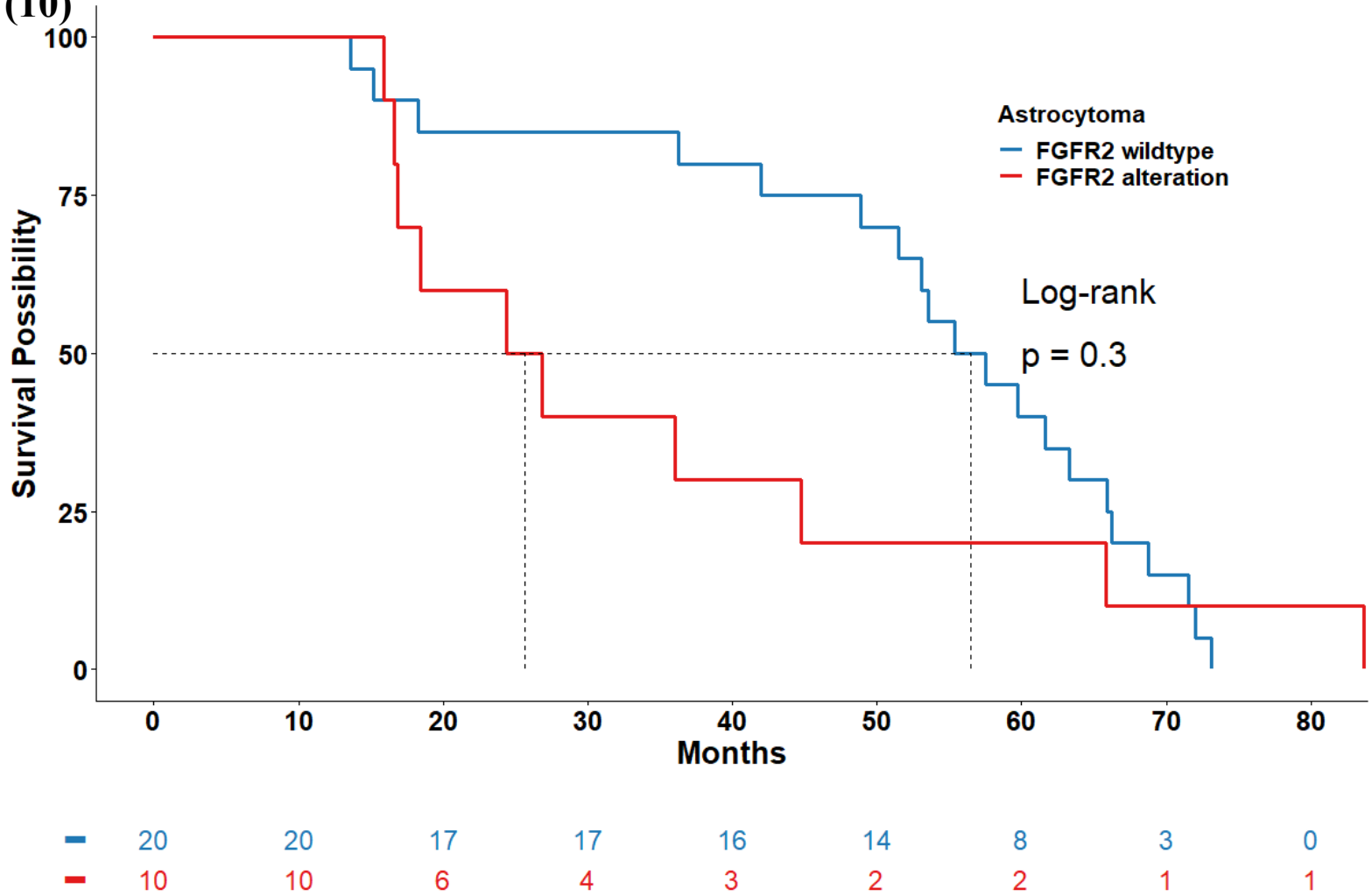

Astrocytoma
EGFR wildtype
EGFR alteration
Log-rank
p = 0.56
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
17 17 14 13 11 9 5 3 1
13 13 9 8 8 7 5 1 0

(9)

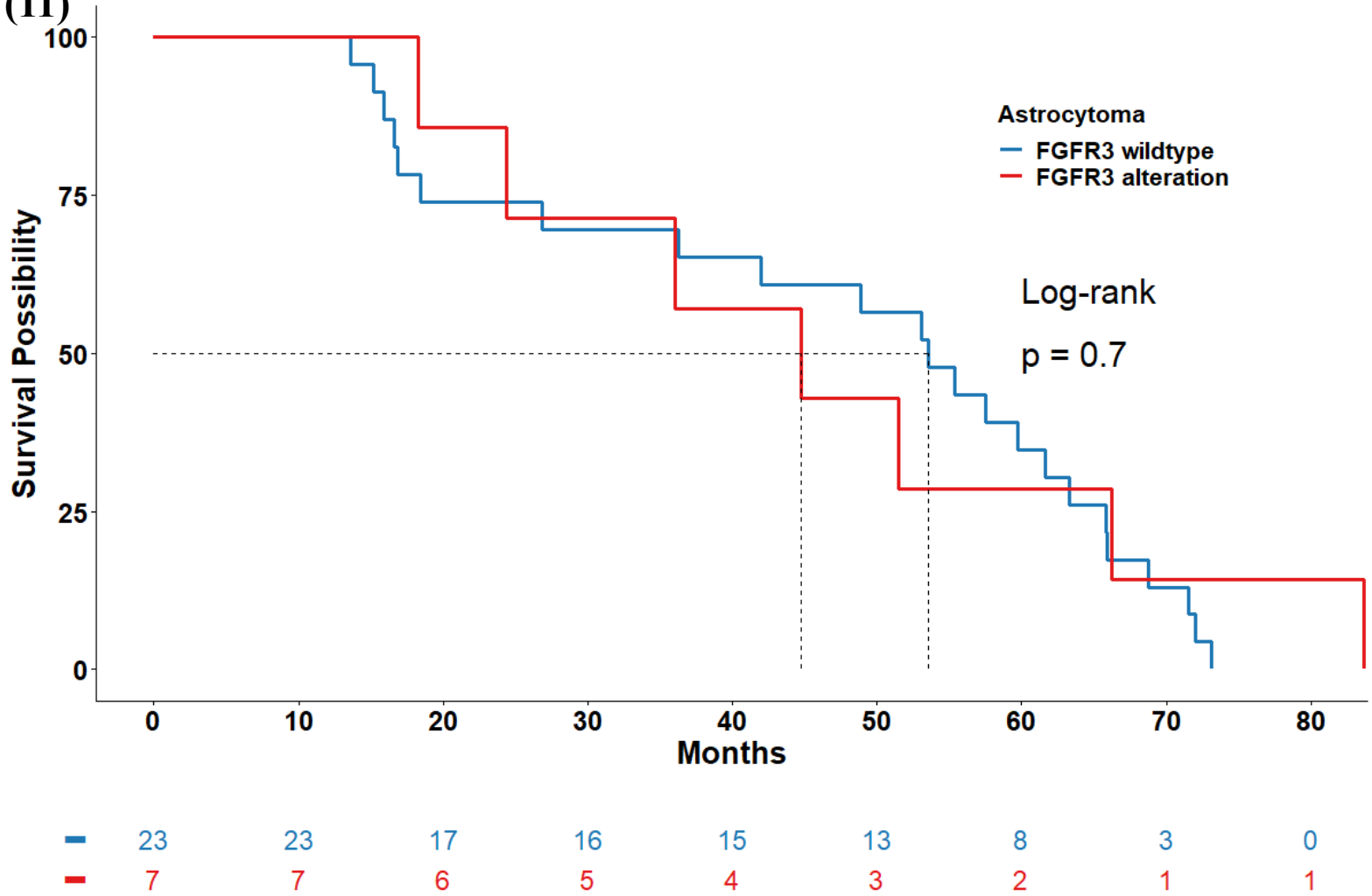


	19	19	15	15	14	13	7	2	1
	11	11	8	6	5	3	3	2	0

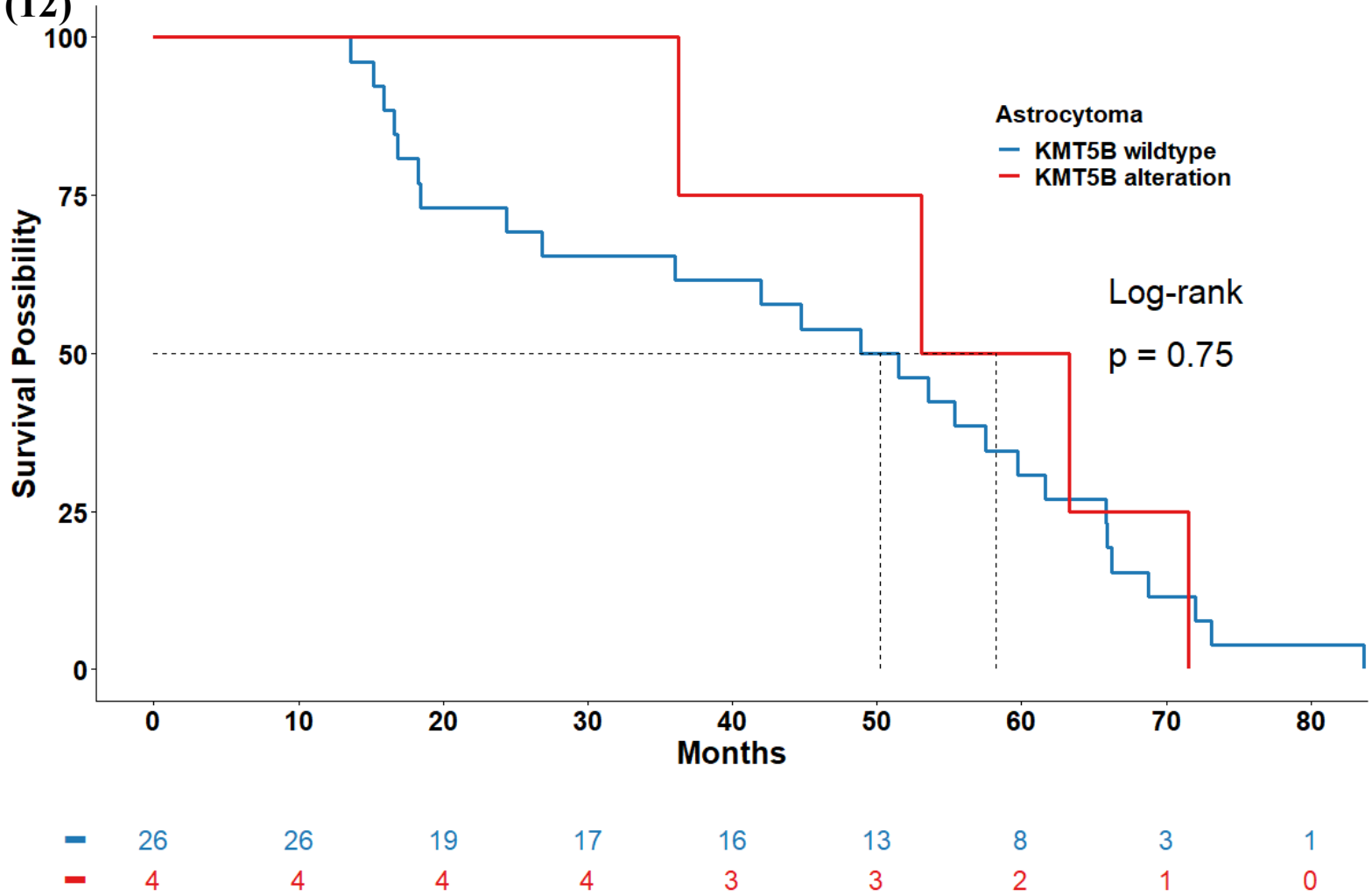
(10)


Astrocytoma
FGFR2 wildtype
FGFR2 alteration
Log-rank
p = 0.3
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
20 20 17 17 16 14 8 3 0
10 10 6 4 3 2 2 1 1

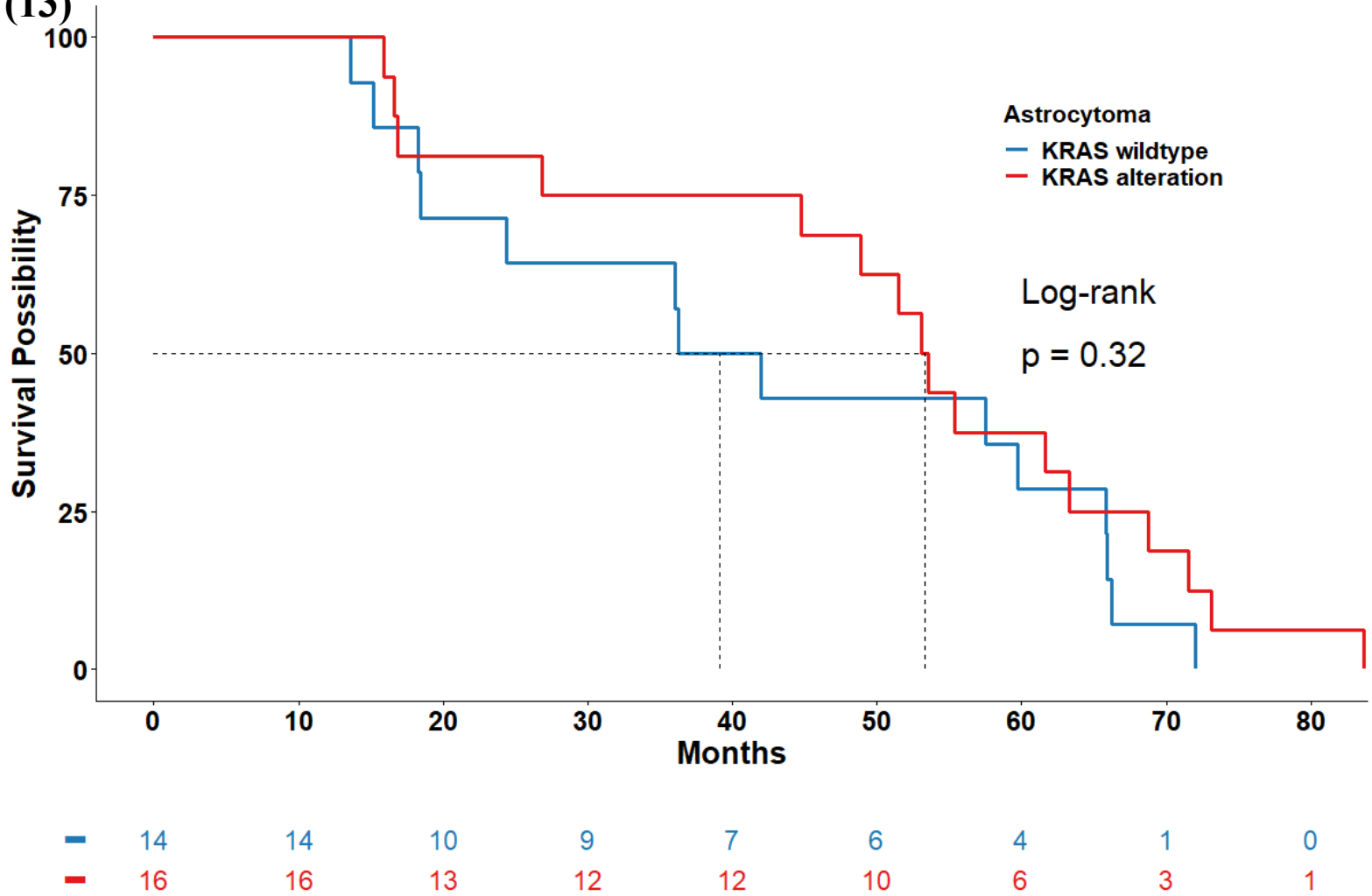
(11)


Survival Possibility
100
75
50
25
0
Astrocytoma
FGFR3 wildtype
FGFR3 alteration
Log-rank
p = 0.7
0
10
20
30
40
50
60
70
80
Months
23 23 17 16 15 13 8 3 0
7 7 6 5 4 3 2 1 1

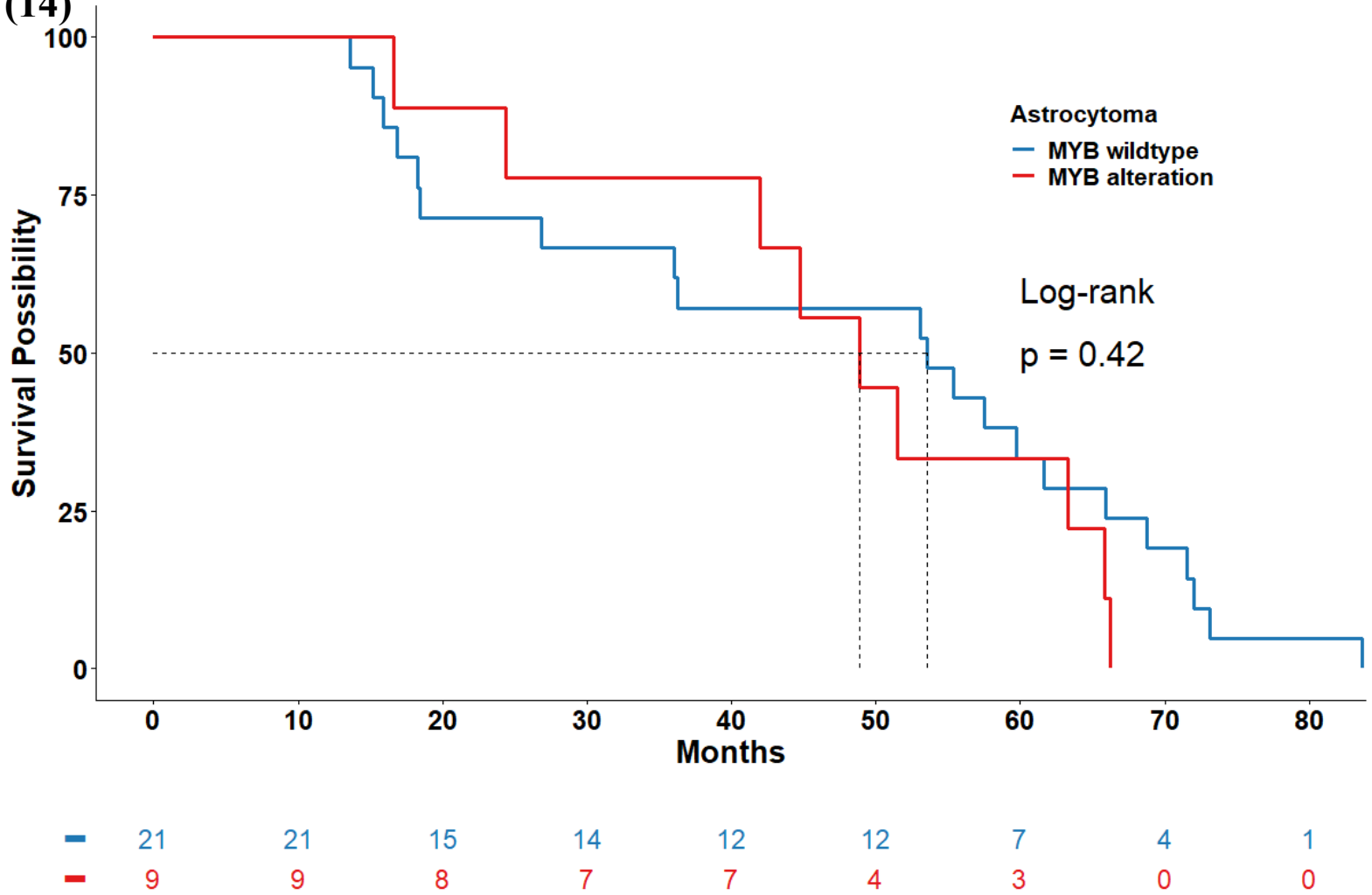
(12)


Astrocytoma
KMT5B wildtype
KMT5B alteration
Log-rank
p = 0.75
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
26 26 19 17 16 13 8 3 1
4 4 4 4 3 3 2 1 0

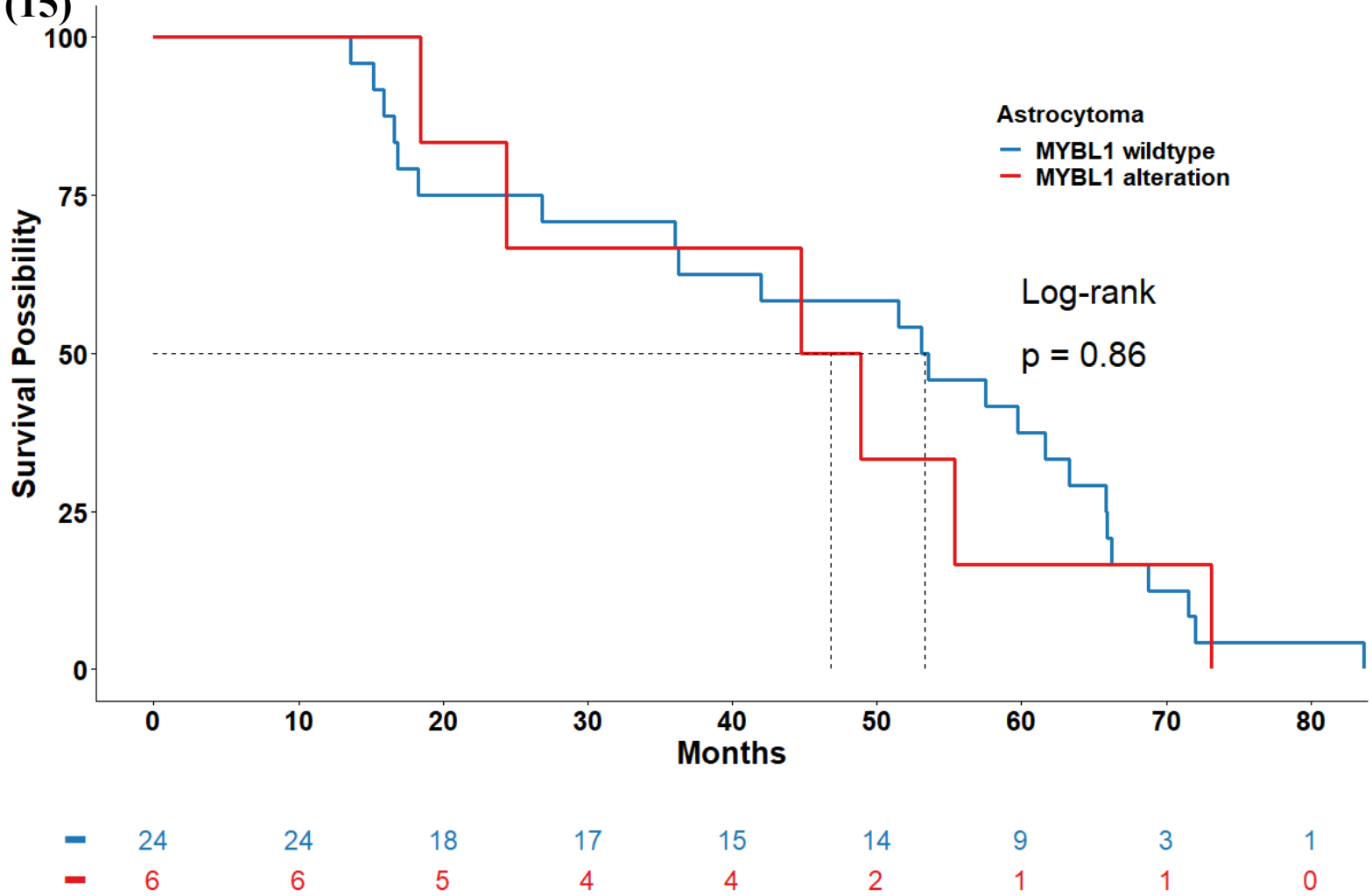
(13)


Astrocytoma
KRAS wildtype
KRAS alteration
Log-rank
p = 0.32
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
14 14 10 9 7 6 4 1 0
16 16 13 12 12 10 6 3 1

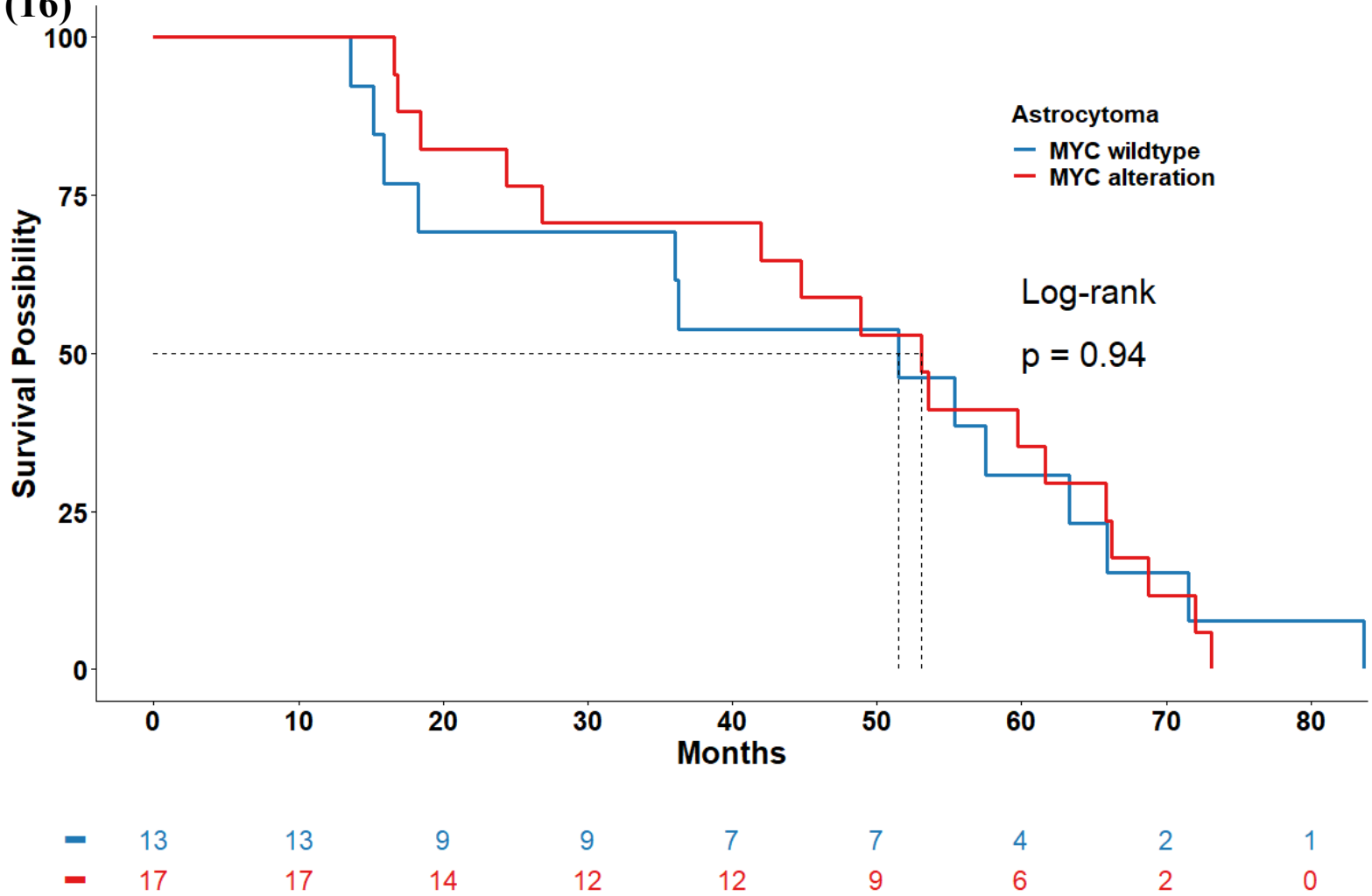
(14)


Astrocytoma
MYB wildtype
MYB alteration
Log-rank
p = 0.42
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
21 21 15 14 12 12 7 4 1
9 9 8 7 7 4 3 0 0

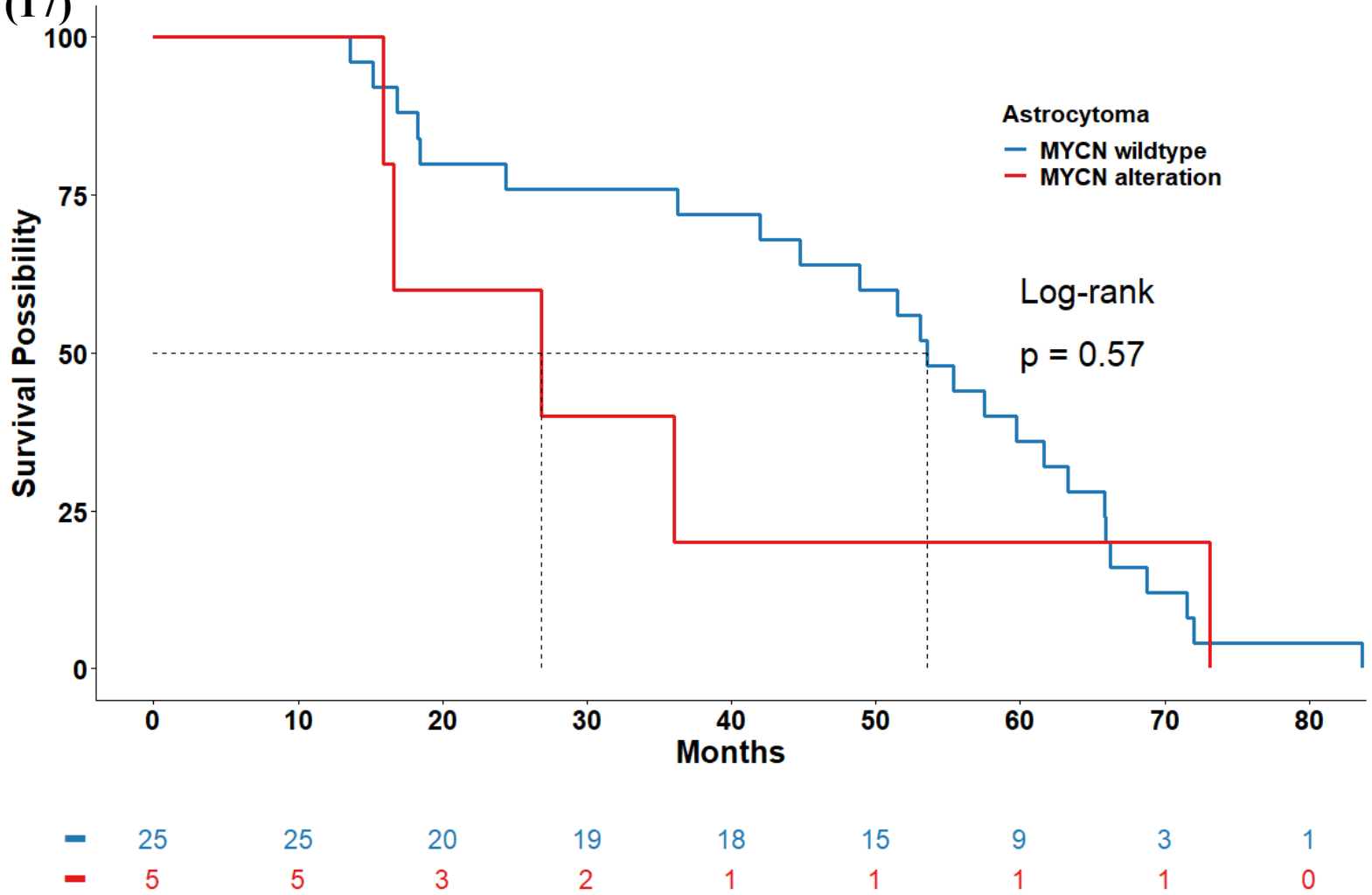
(15)


Astrocytoma
MYBL1 wildtype
MYBL1 alteration
Log-rank
p = 0.86
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
24 24 18 17 15 14 9 3 1
6 6 5 4 4 2 1 1 0

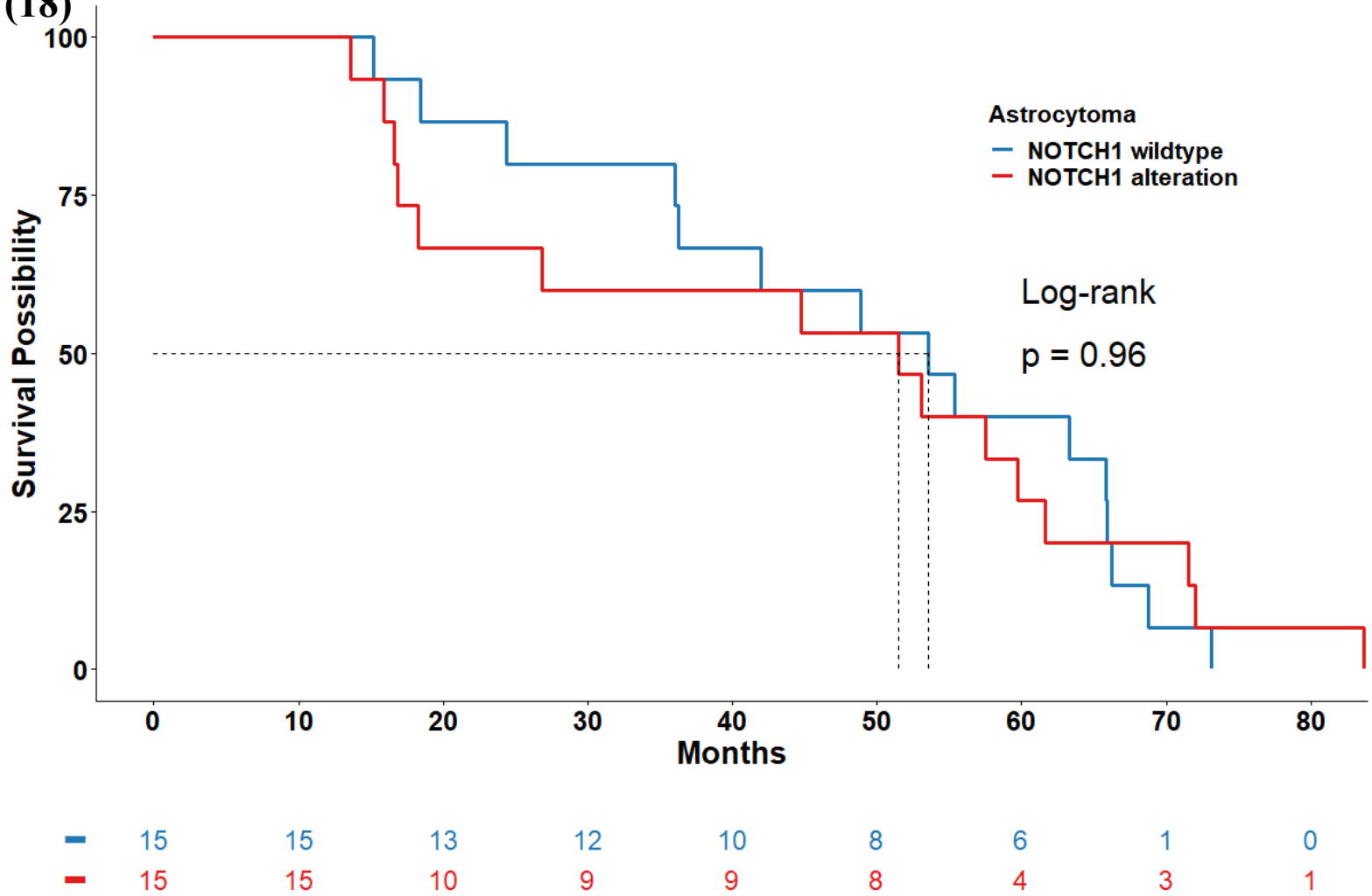
(16)


Astrocytoma
MYC wildtype
MYC alteration
Log-rank
p = 0.94
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
13 13 9 9 7 7 4 2 1
17 17 14 12 12 9 6 2 0

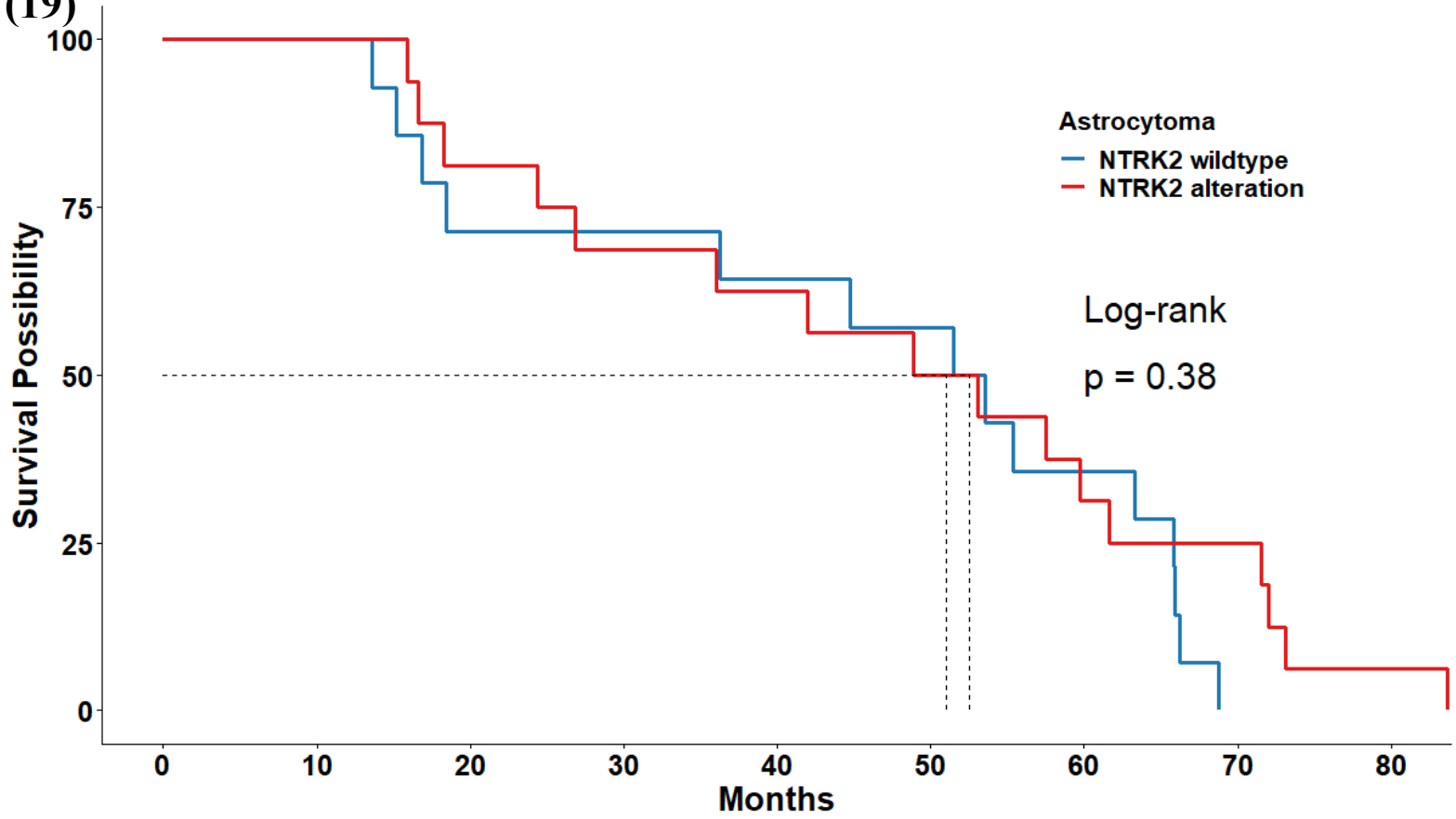
(17)


Astrocytoma
MYCN wildtype
MYCN alteration
Log-rank
p = 0.57
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
25 25 20 19 18 15 9 3 1
5 5 3 2 1 1 1 1 0

(18)

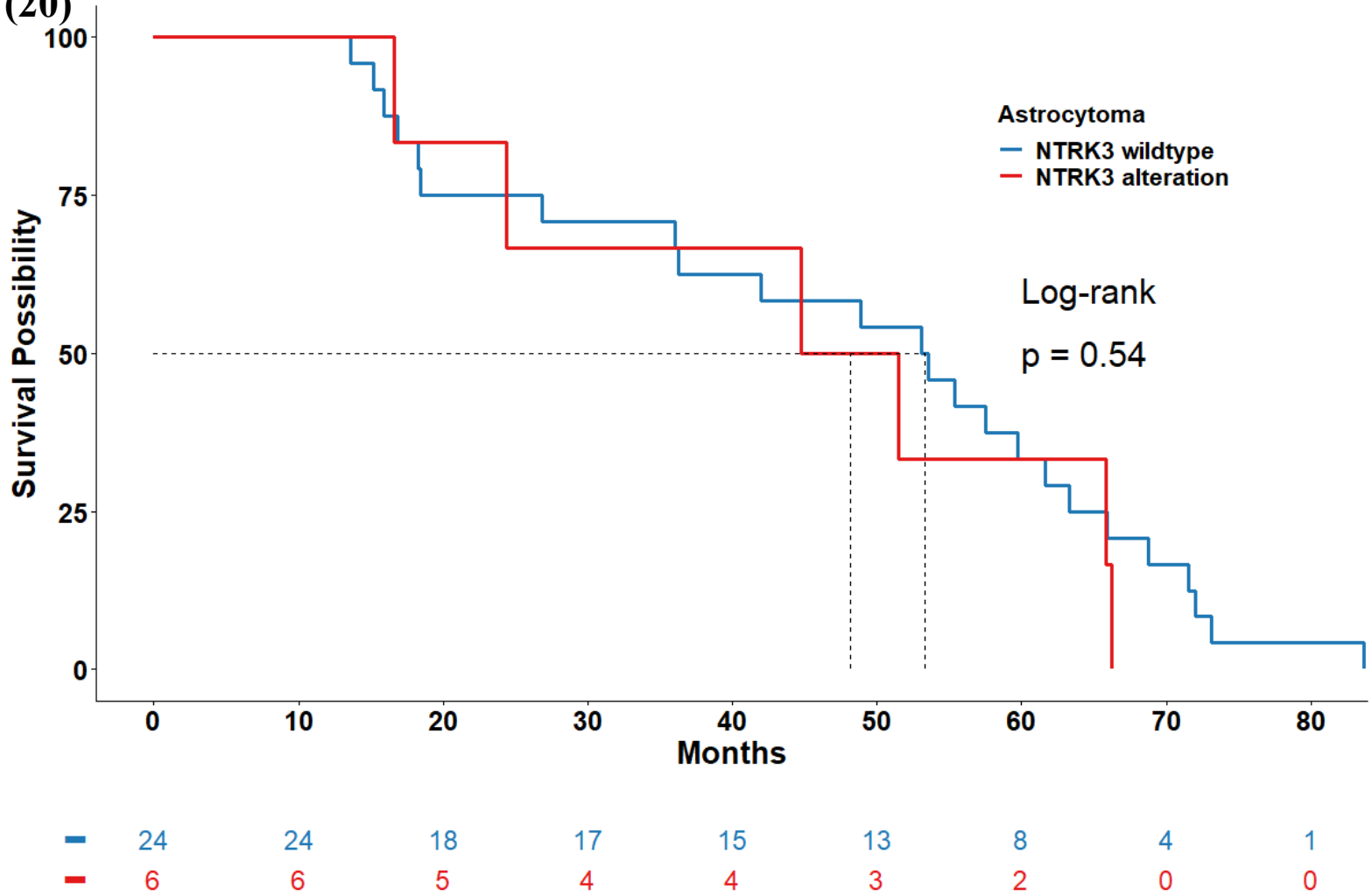

Astrocytoma
NOTCH1 wildtype
NOTCH1 alteration
Log-rank
p = 0.96
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
15 15 13 12 10 8 6 1 0
15 15 10 9 9 8 4 3 1

(19)

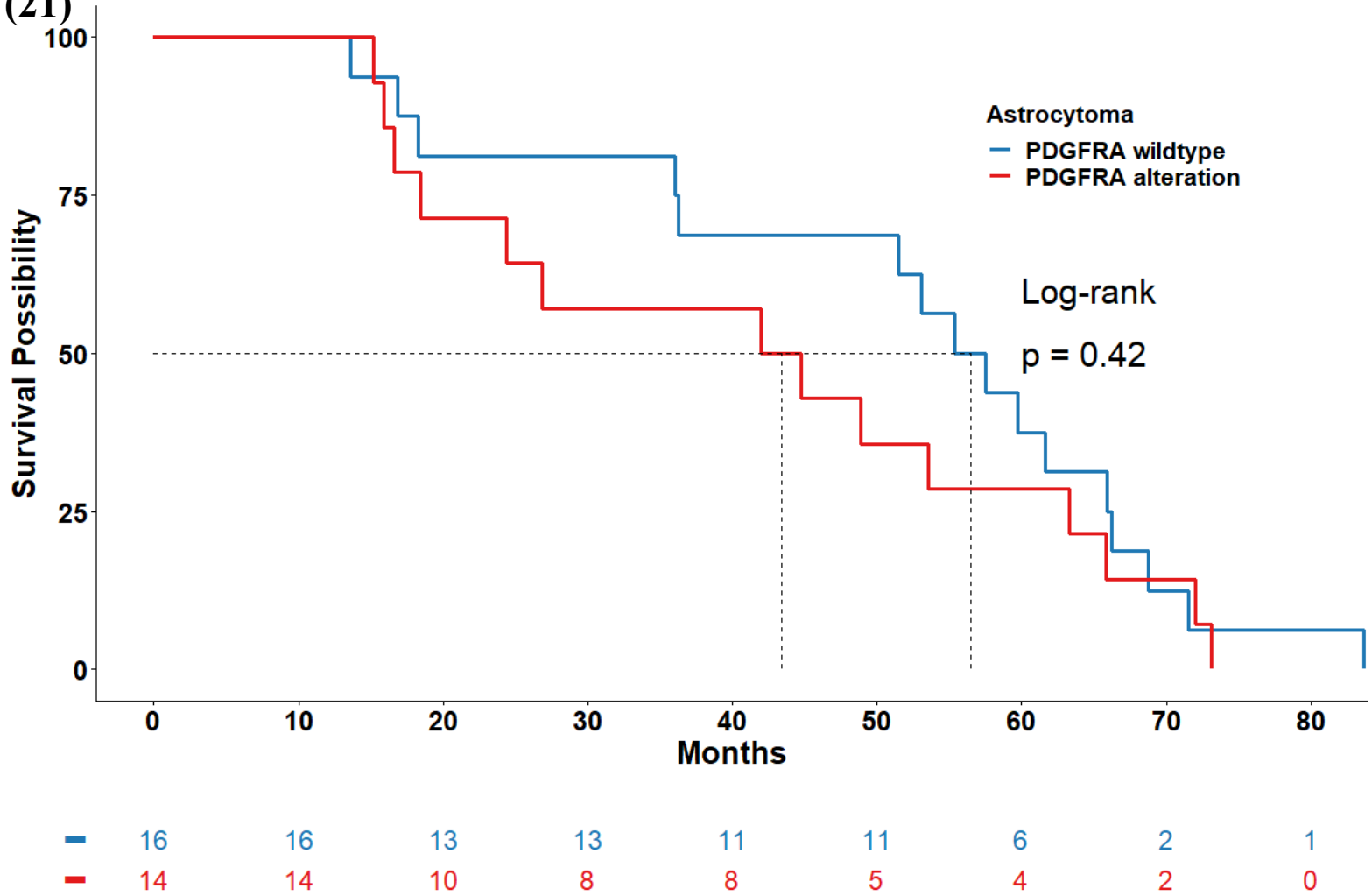


	14	14	10	10	9	8	5	0	0
	16	16	13	11	10	8	5	4	1

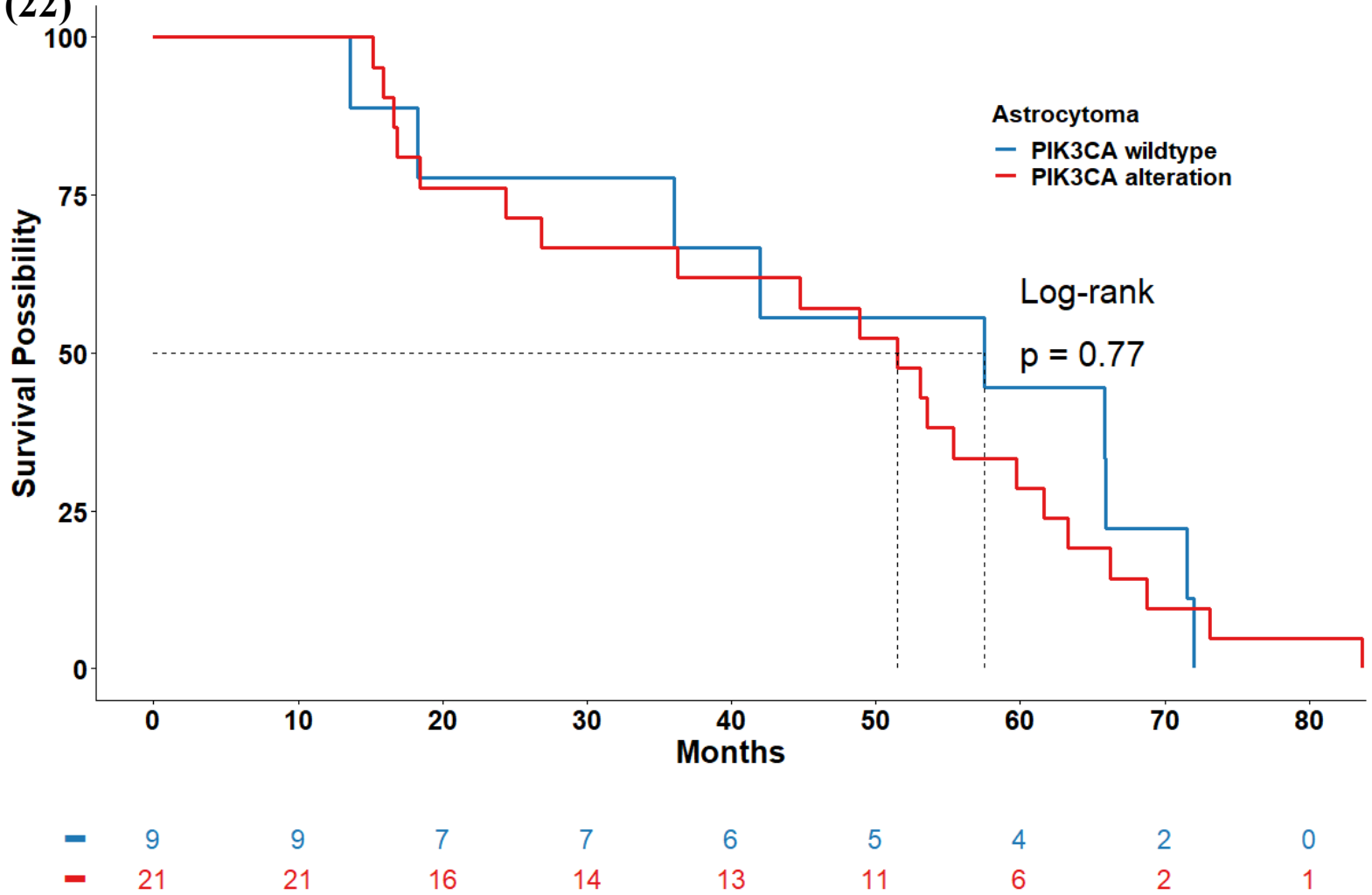
(20)


Astrocytoma
NTRK3 wildtype
NTRK3 alteration
Log-rank
p = 0.54
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
24 24 18 17 15 13 8 4 1
6 6 5 4 4 3 2 0 0

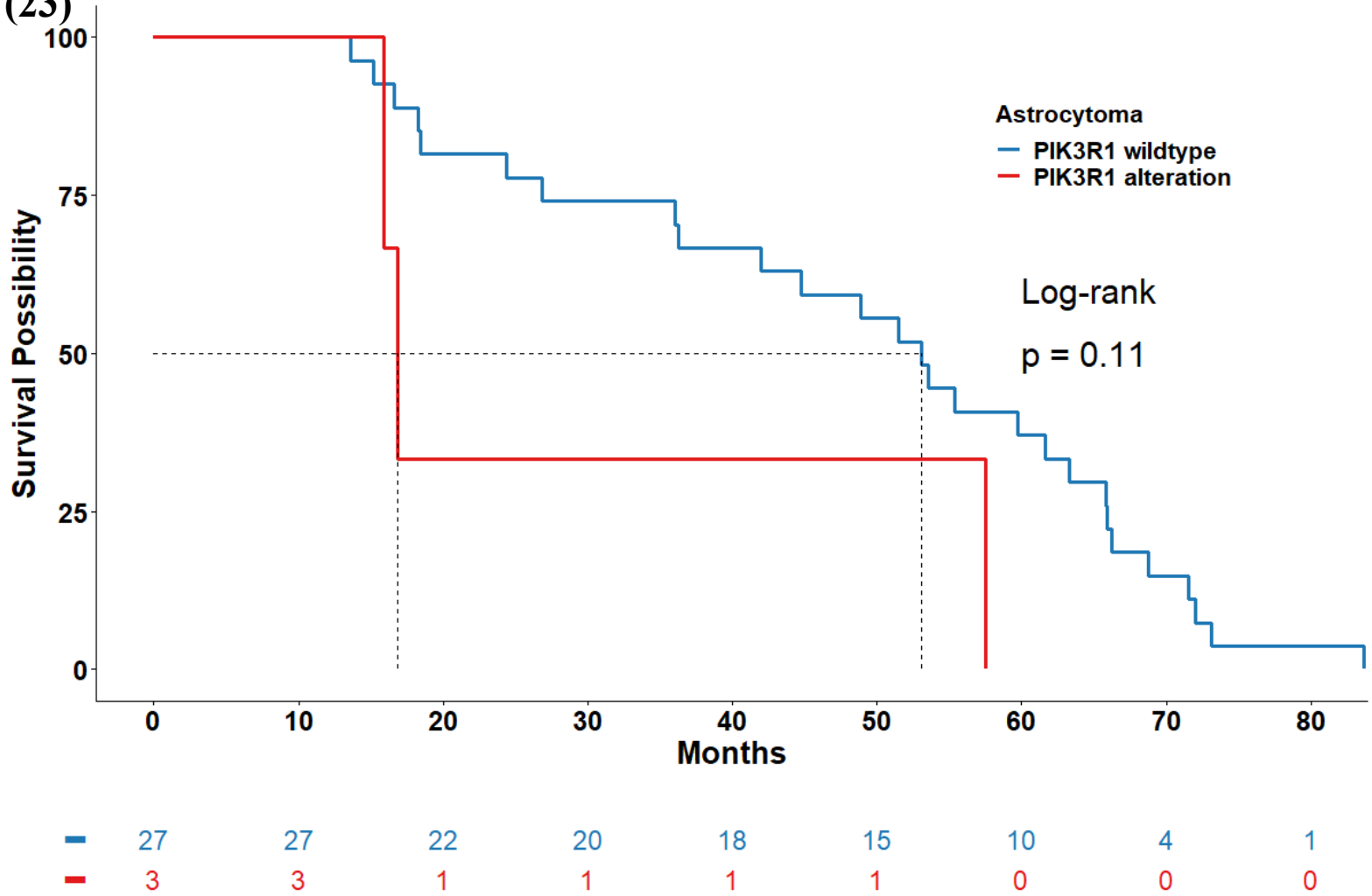
(21)


Astrocytoma
PDGFRA wildtype
PDGFRA alteration
Log-rank
p = 0.42
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
16 16 13 13 11 11 6 2 1
14 14 10 8 8 5 4 2 0

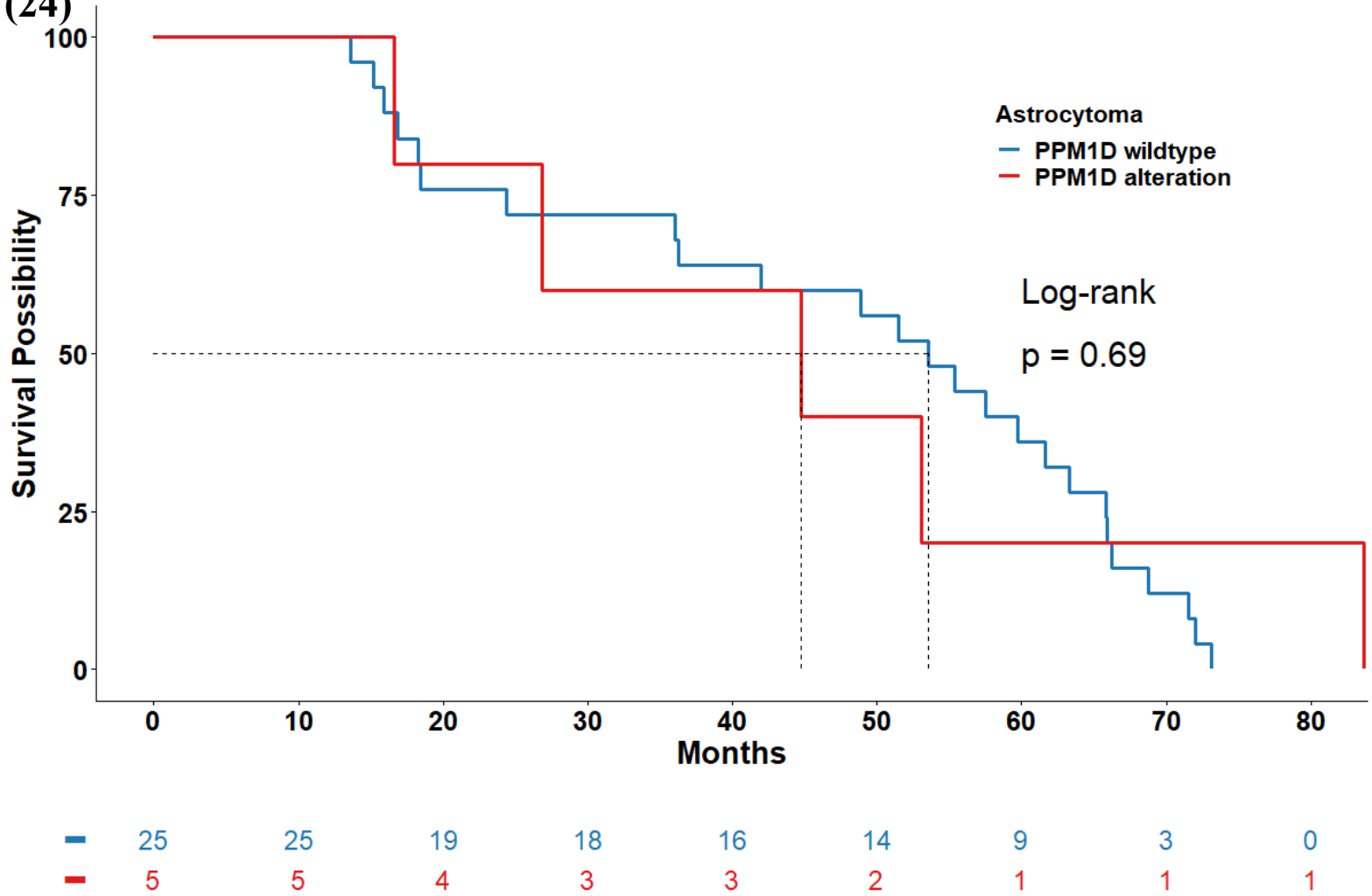
(22)


Astrocytoma
PIK3CA wildtype
PIK3CA alteration
Log-rank
p = 0.77
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
9 9 7 7 6 5 4 2 0
21 21 16 14 13 11 6 2 1

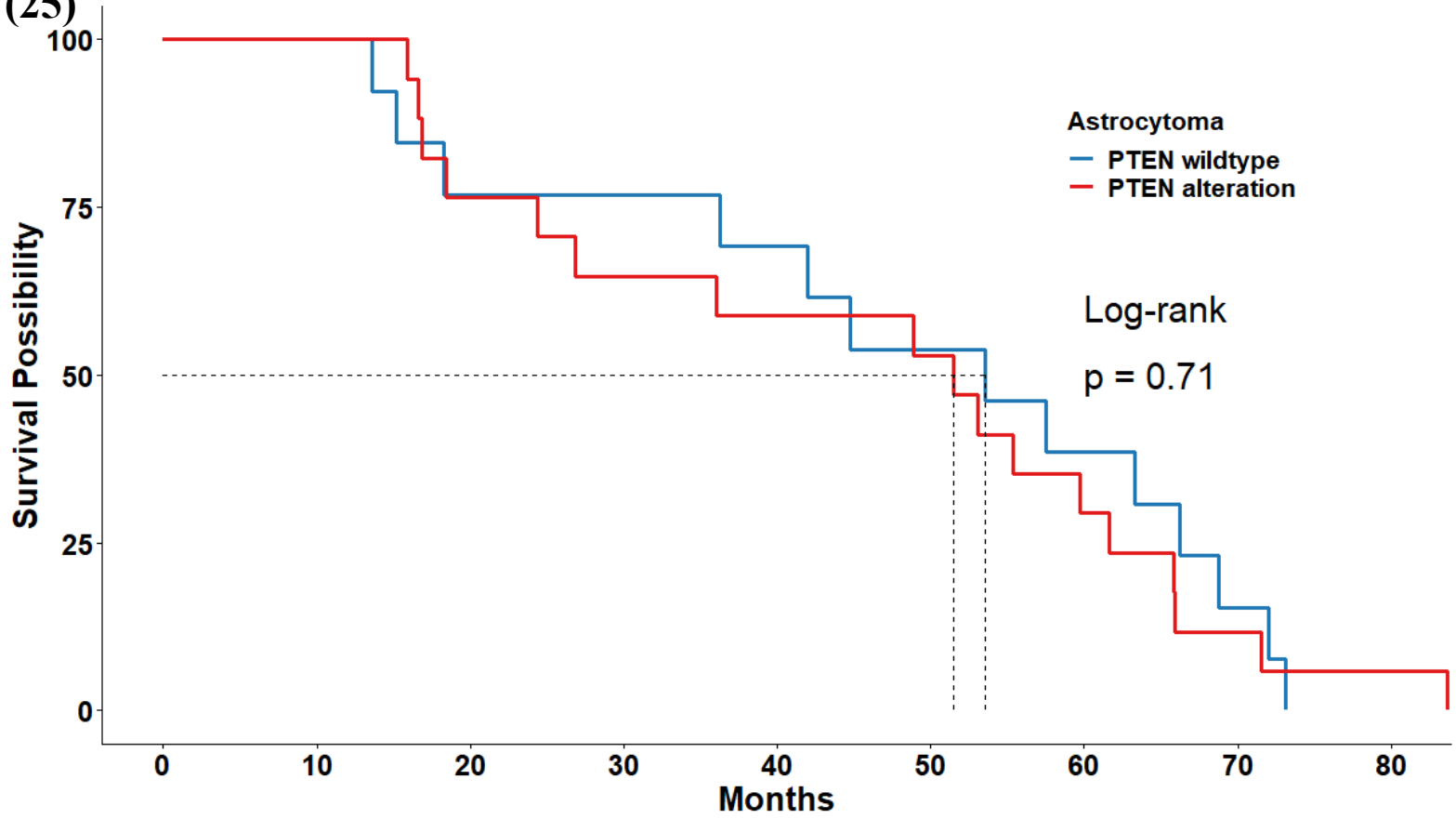
(23)


Astrocytoma
PIK3R1 wildtype
PIK3R1 alteration
Log-rank
p = 0.11
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
27 27 22 20 18 15 10 4 1
3 3 1 1 1 1 0 0 0

(24)

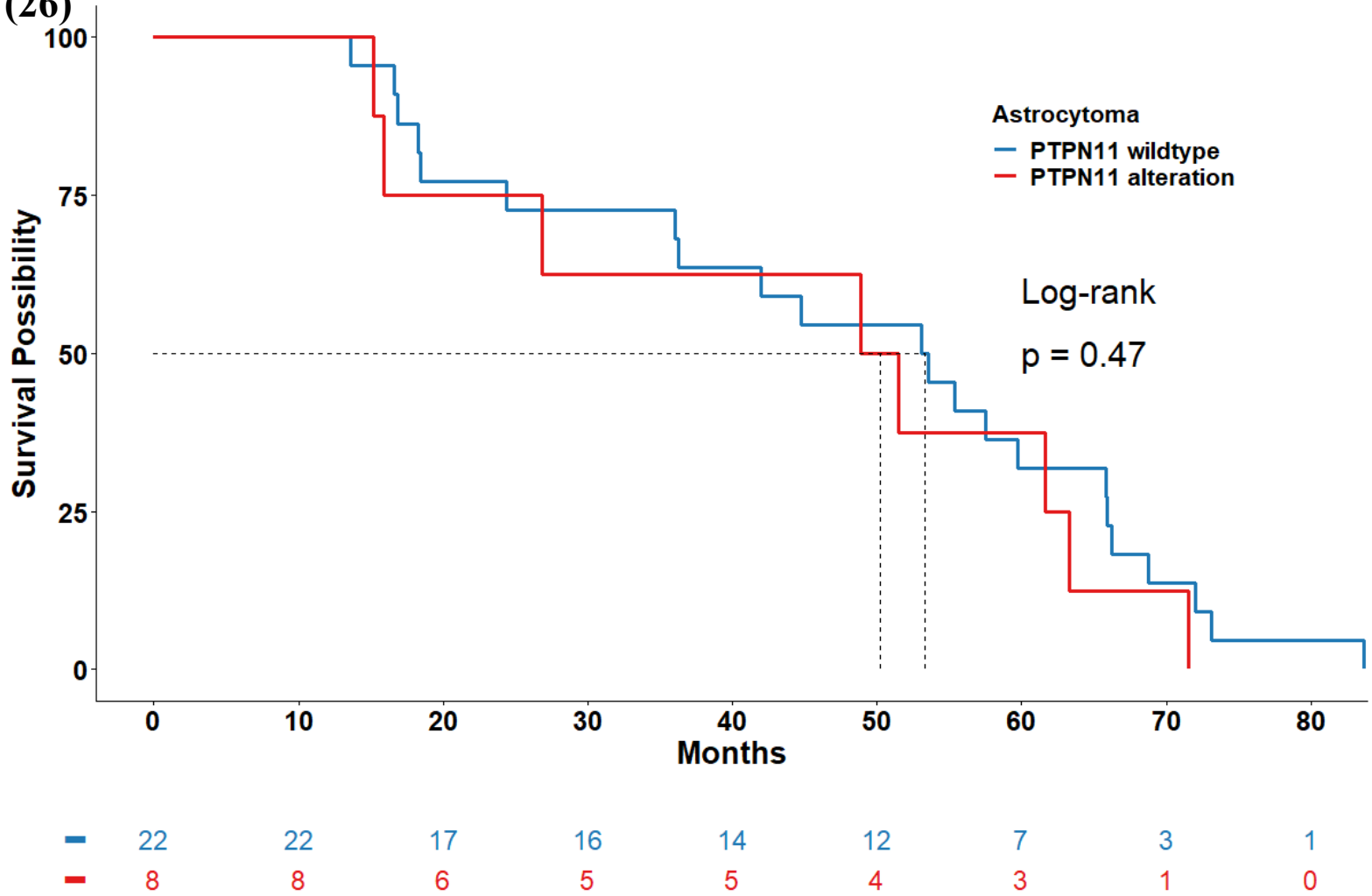

Astrocytoma
PPM1D wildtype
PPM1D alteration
Log-rank
p = 0.69
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
25 25 19 18 16 14 9 3 0
5 5 4 3 3 2 1 1 1

(25)

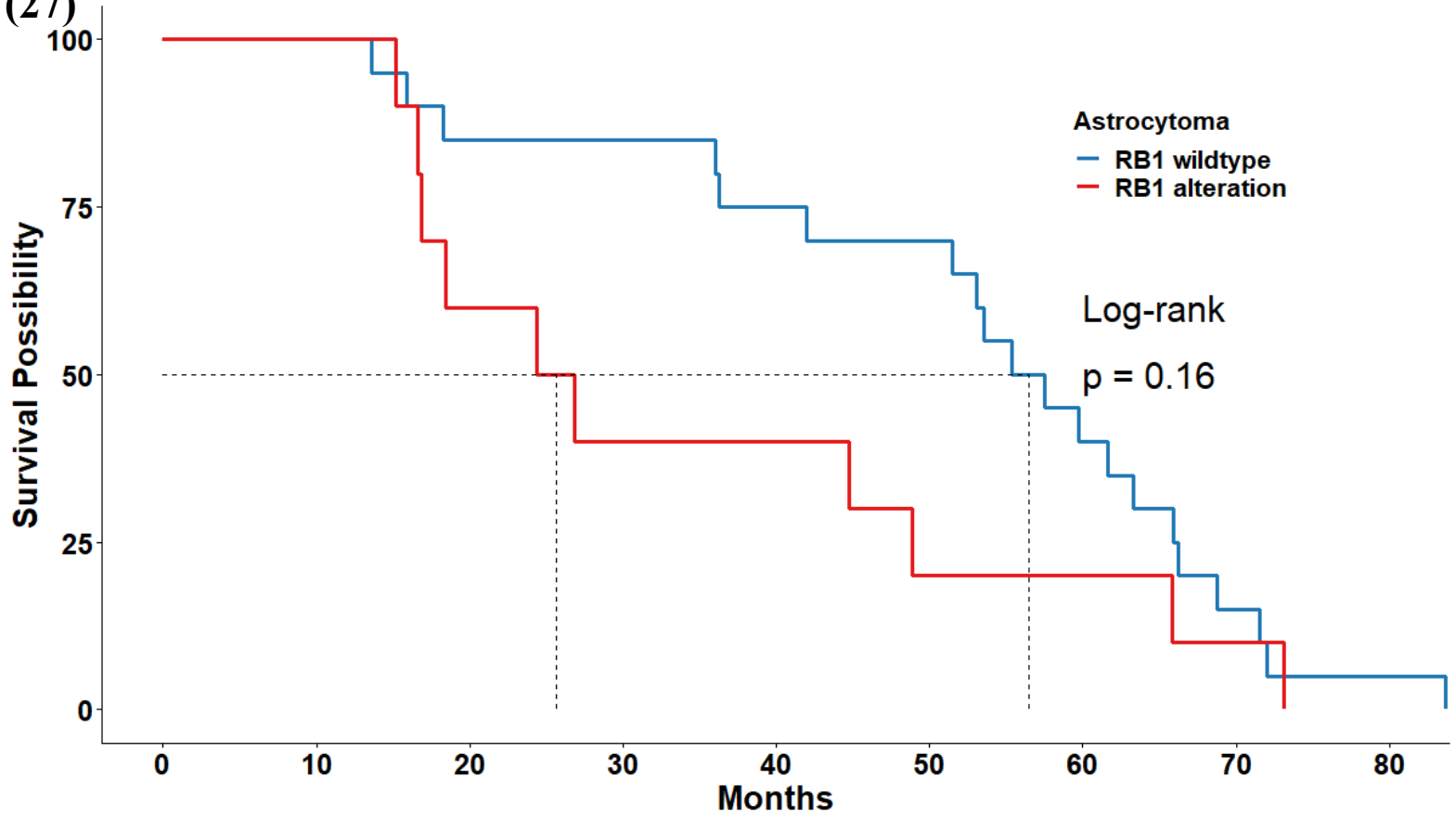


PTEN wildtype	13	13	10	10	9	7	5	2	0
PTEN alteration	17	17	13	11	10	9	5	2	1

(26)

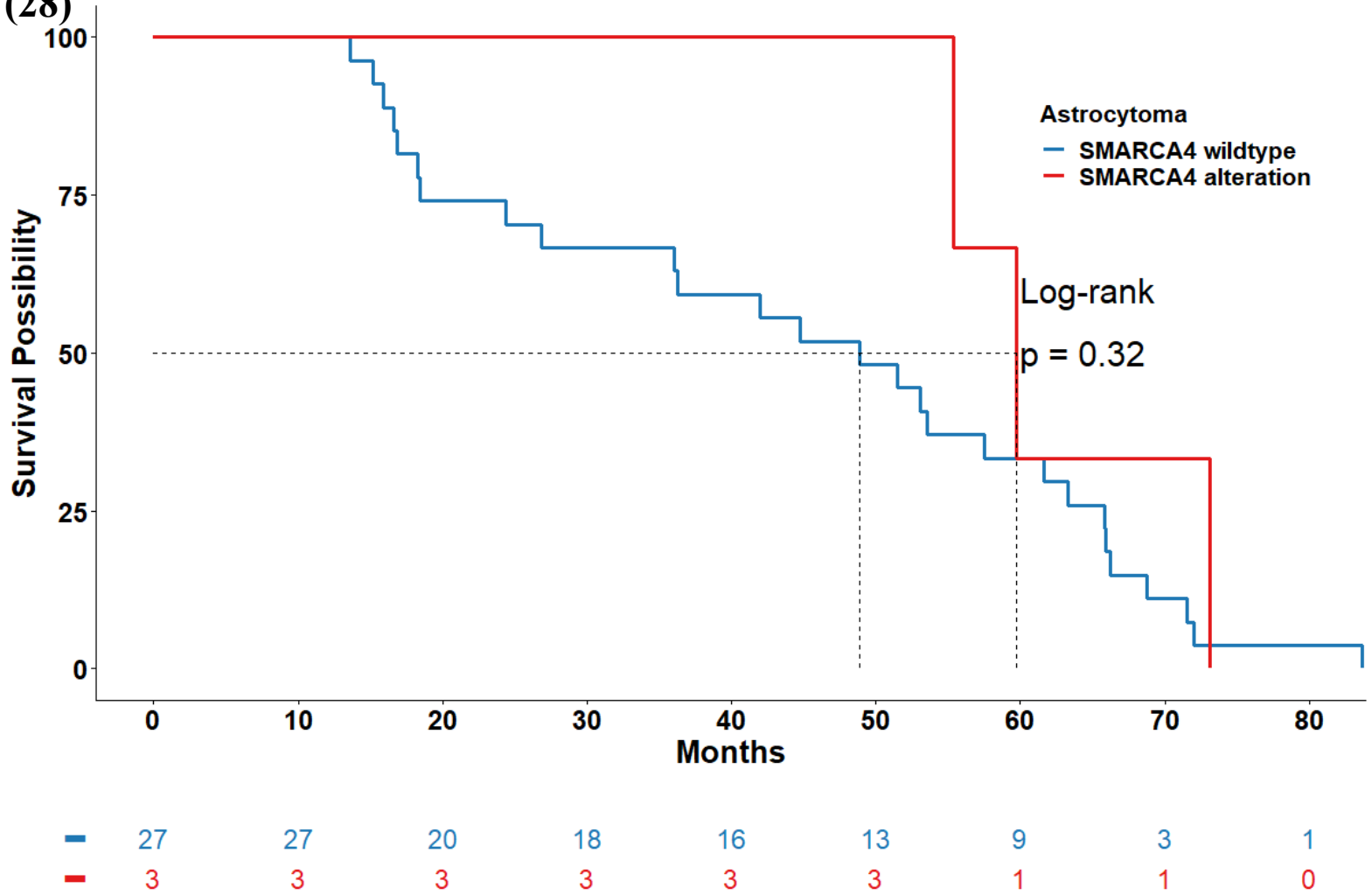

Astrocytoma
PTPN11 wildtype
PTPN11 alteration
Log-rank
p = 0.47
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
22 22 17 16 14 12 7 3 1
8 8 6 5 5 4 3 1 0

(27)

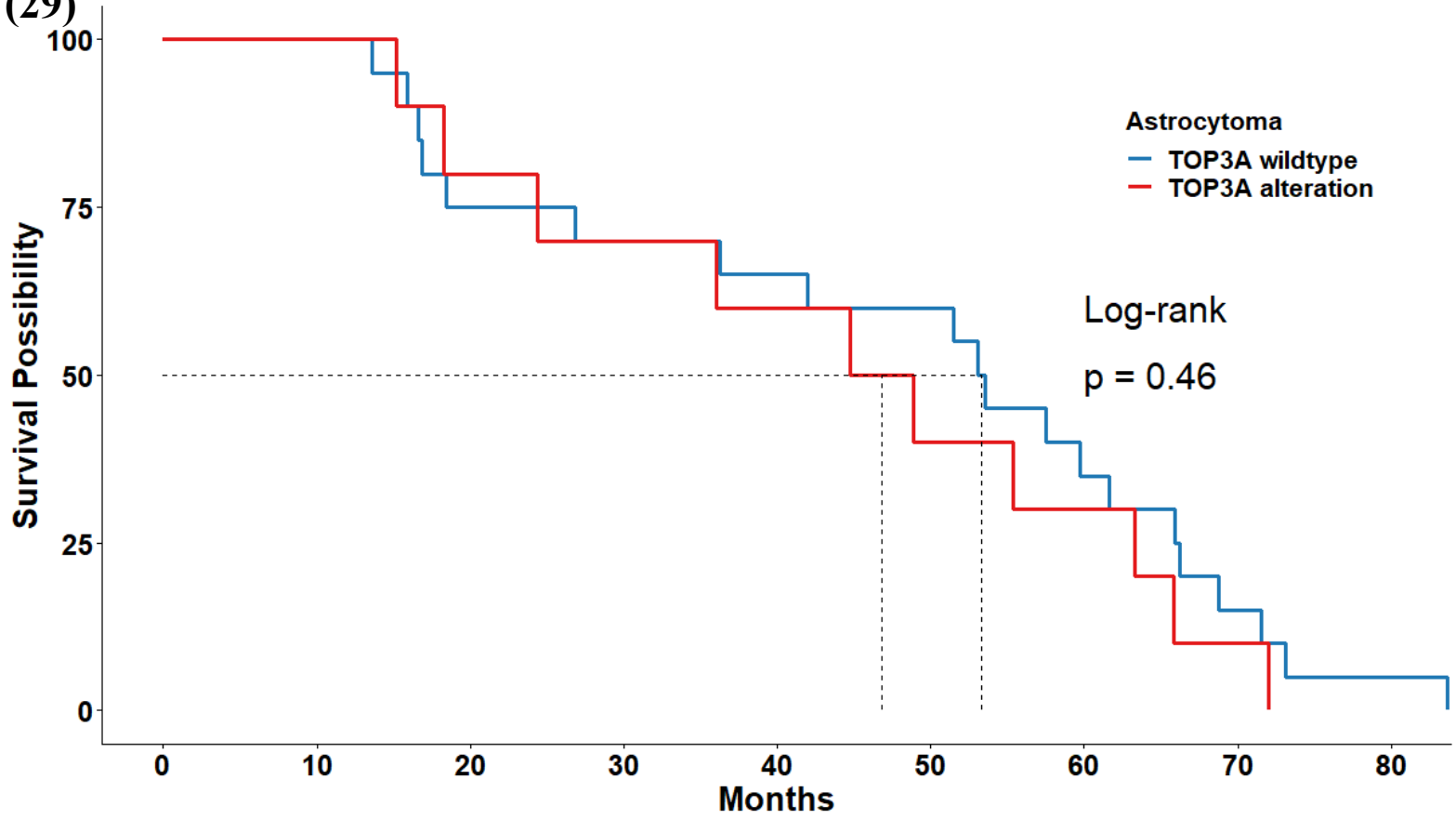


	20	20	17	17	15	14	8	3	1
	10	10	6	4	4	2	2	1	0

(28)

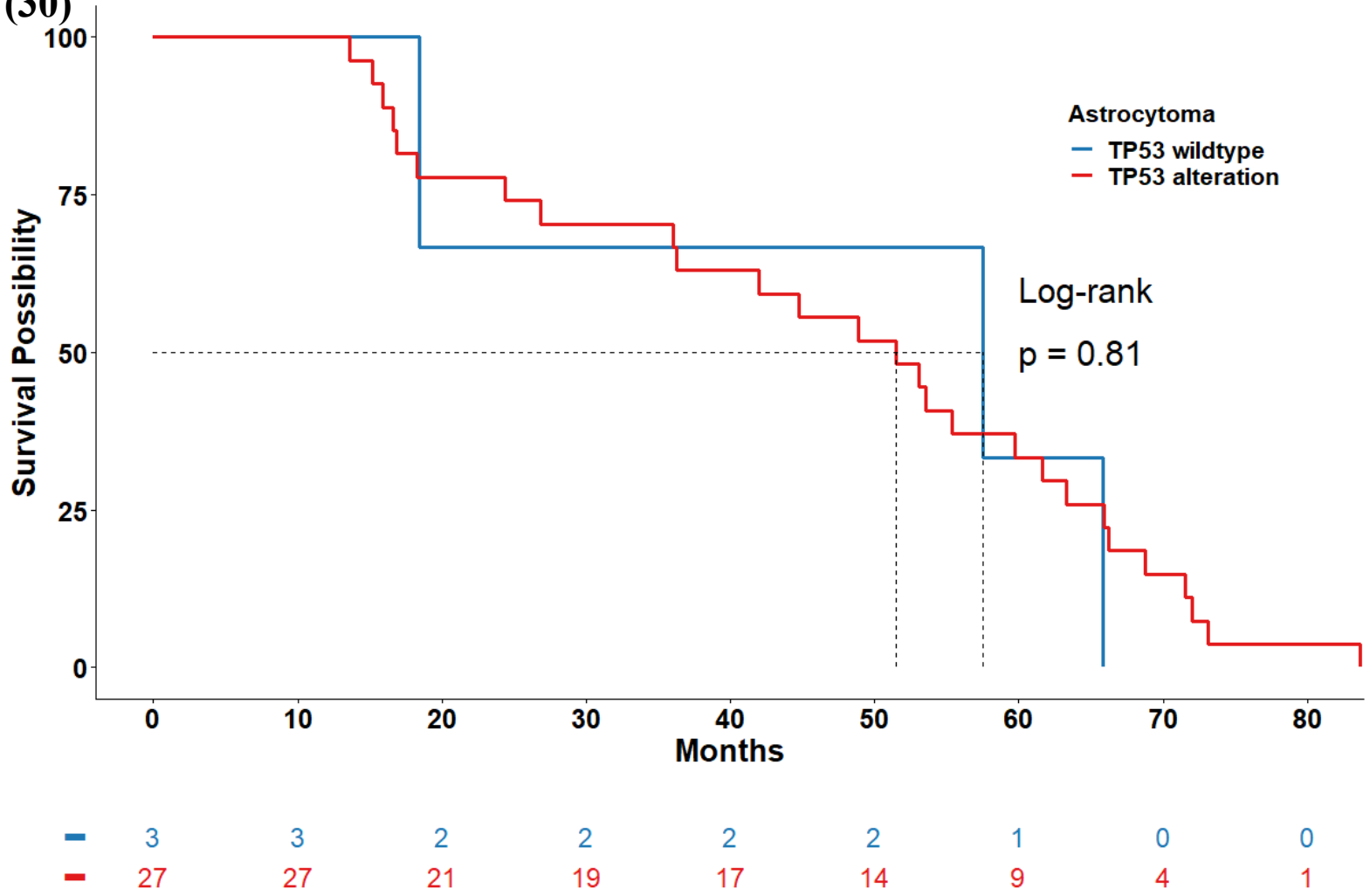

Astrocytoma
SMARCA4 wildtype
SMARCA4 alteration
Log-rank
p = 0.32
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
27 27 20 18 16 13 9 3 1
3 3 3 3 3 3 1 1 0

(29)

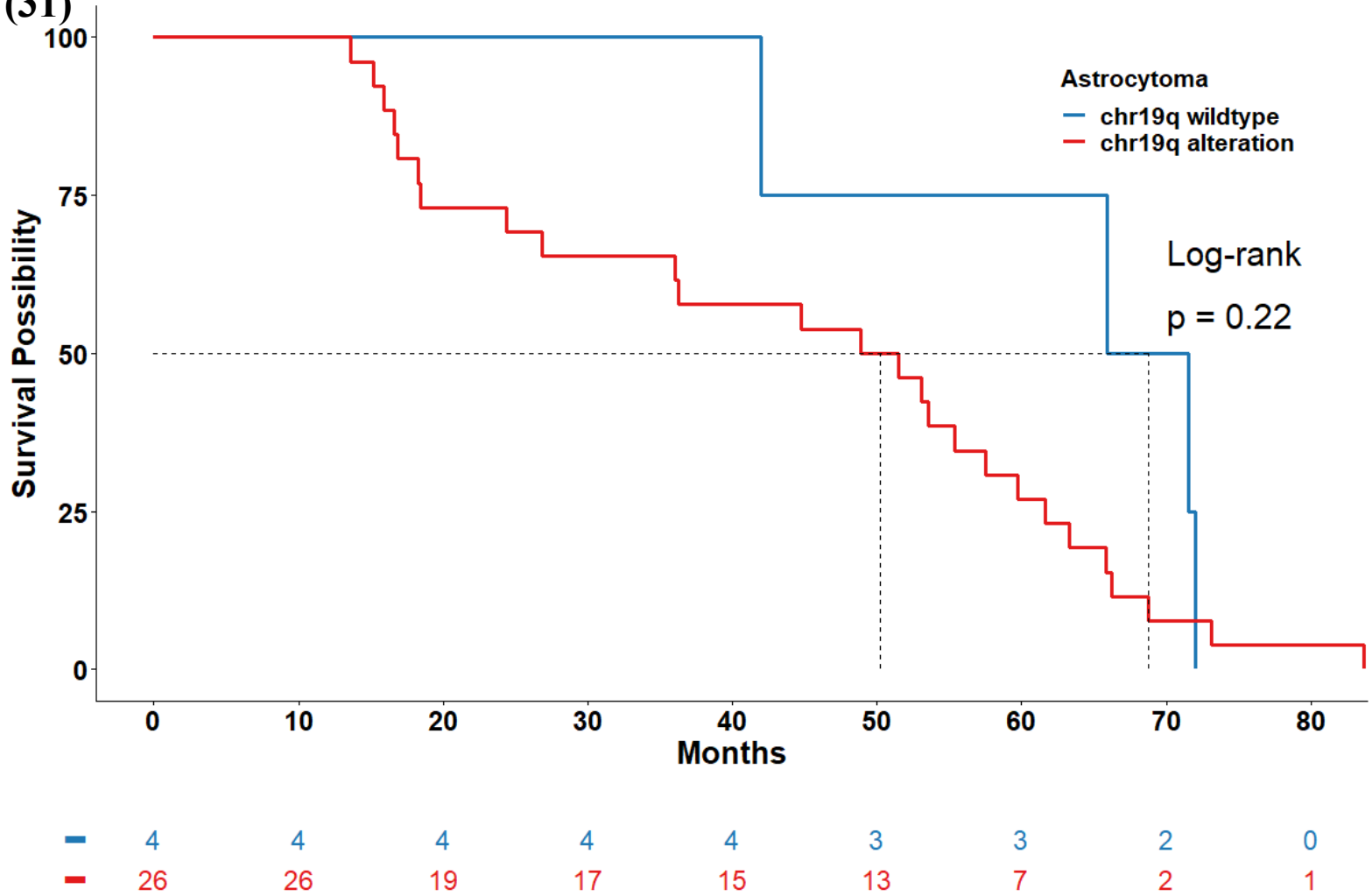


	20	20	15	14	13	12	7	3	1
	10	10	8	7	6	4	3	1	0

(30)


Astrocytoma
TP53 wildtype
TP53 alteration
Log-rank
p = 0.81
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
3 3 2 2 2 2 1 0 0
27 27 21 19 17 14 9 4 1

(31)


Astrocytoma
chr19q wildtype
chr19q alteration
Log-rank
p = 0.22
Survival Possibility
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Months
4 4 4 4 4 3 3 2 0
26 26 19 17 15 13 7 2 1