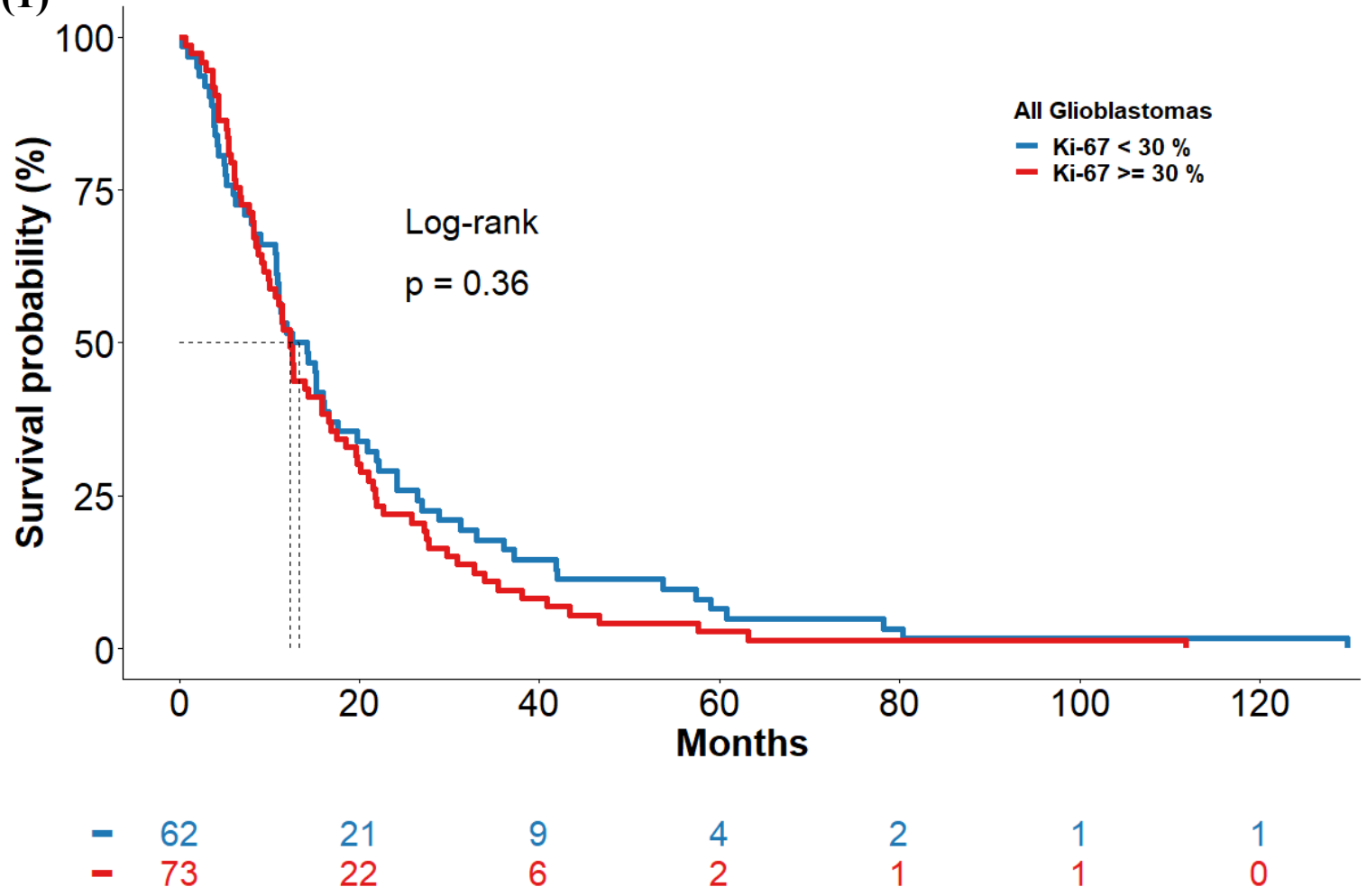
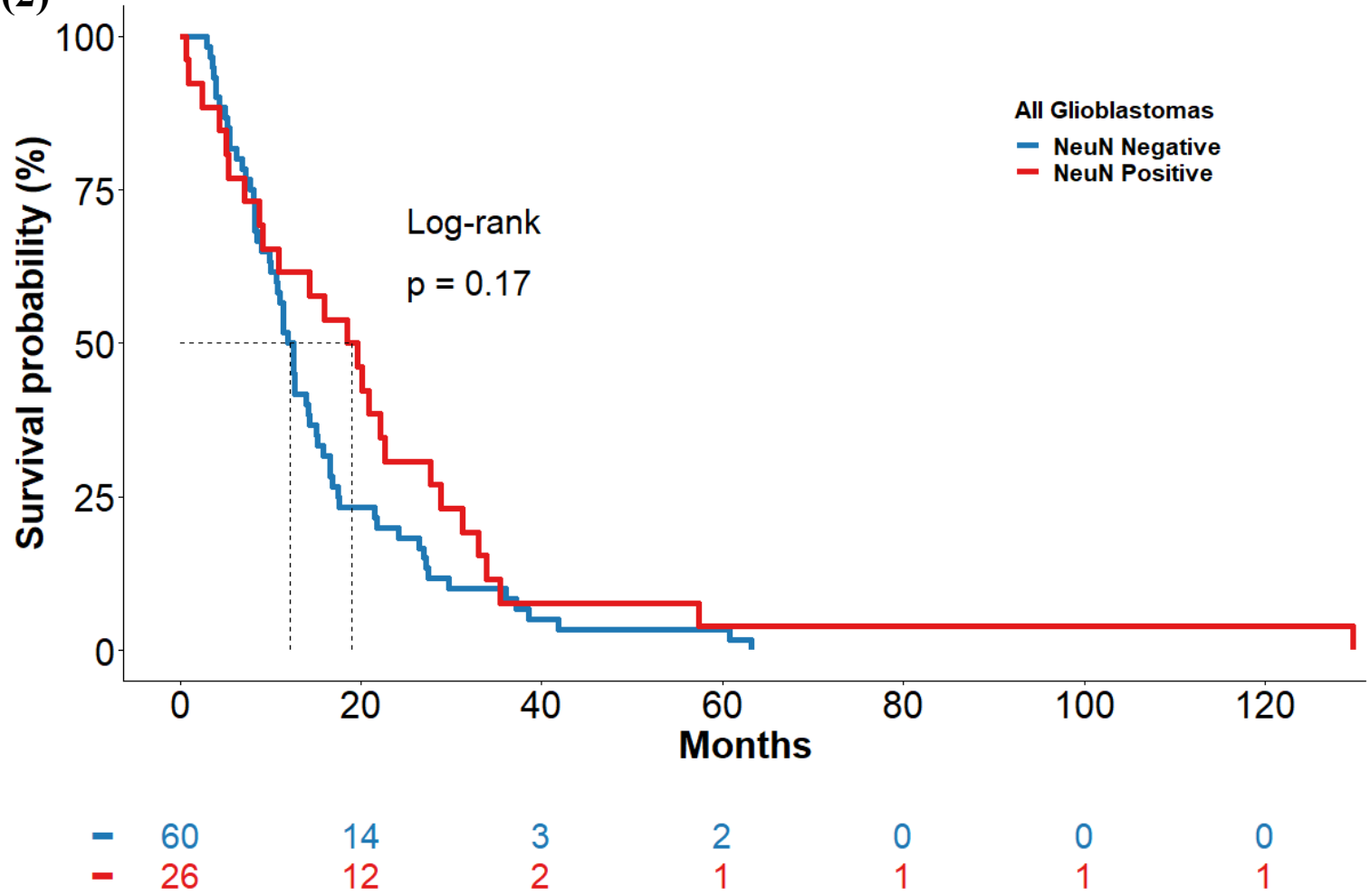
Supplementary Figure 1. Kaplan–Meier curves showing no significant effects of certain genetic and immunohistochemical alterations on the overall survival of patients with glioblastomas (1-39). Since the numbers of patients divided into two groups (e.g. FGFR1 Wildtype/FGFR1 Alteration) using different 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.

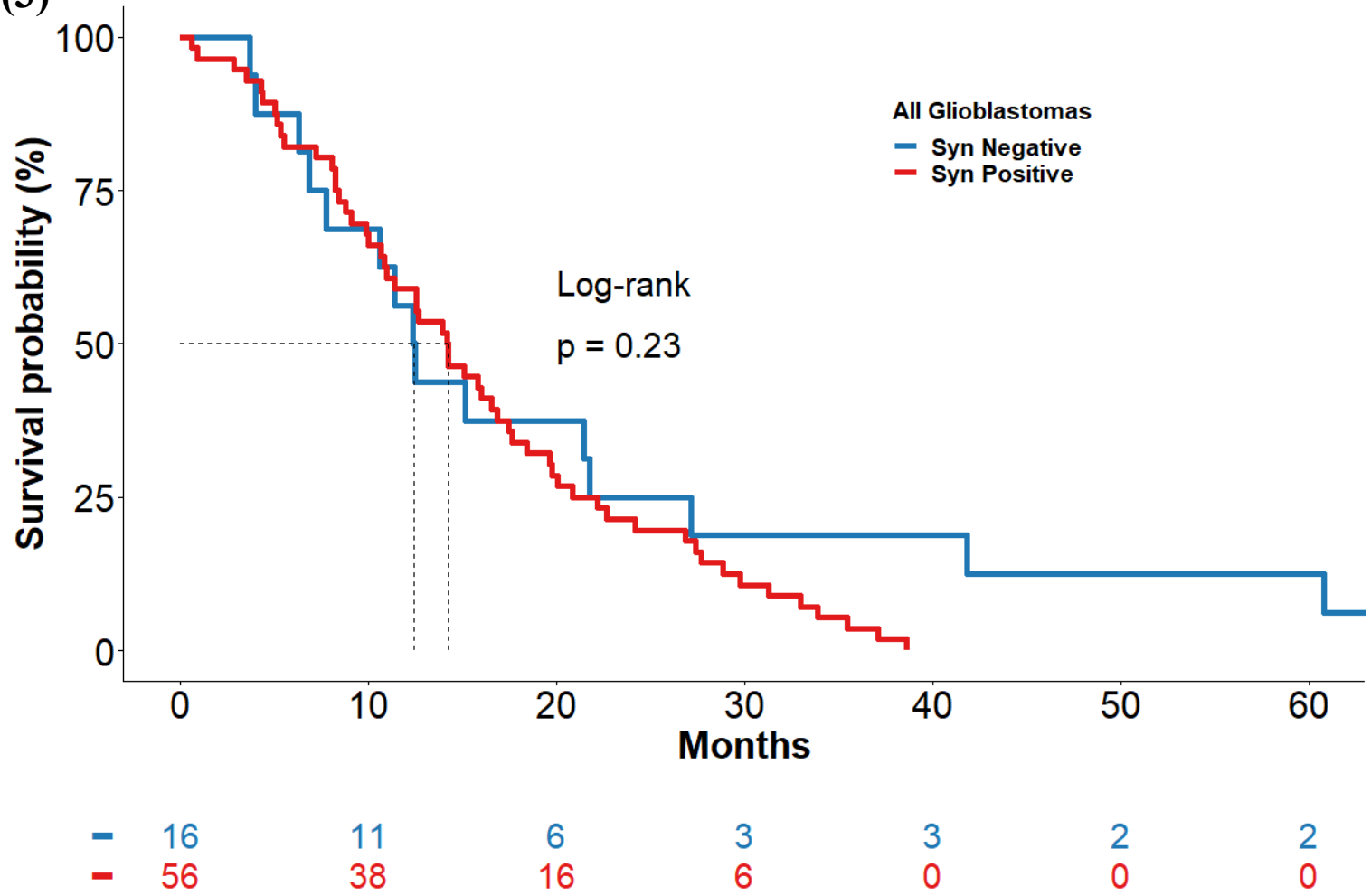
(1)


All Glioblastomas
Ki-67 < 30 %
Ki-67 >= 30 %
Log-rank
p = 0.36
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
62 21 9 4 2 1 1
73 22 6 2 1 1 0

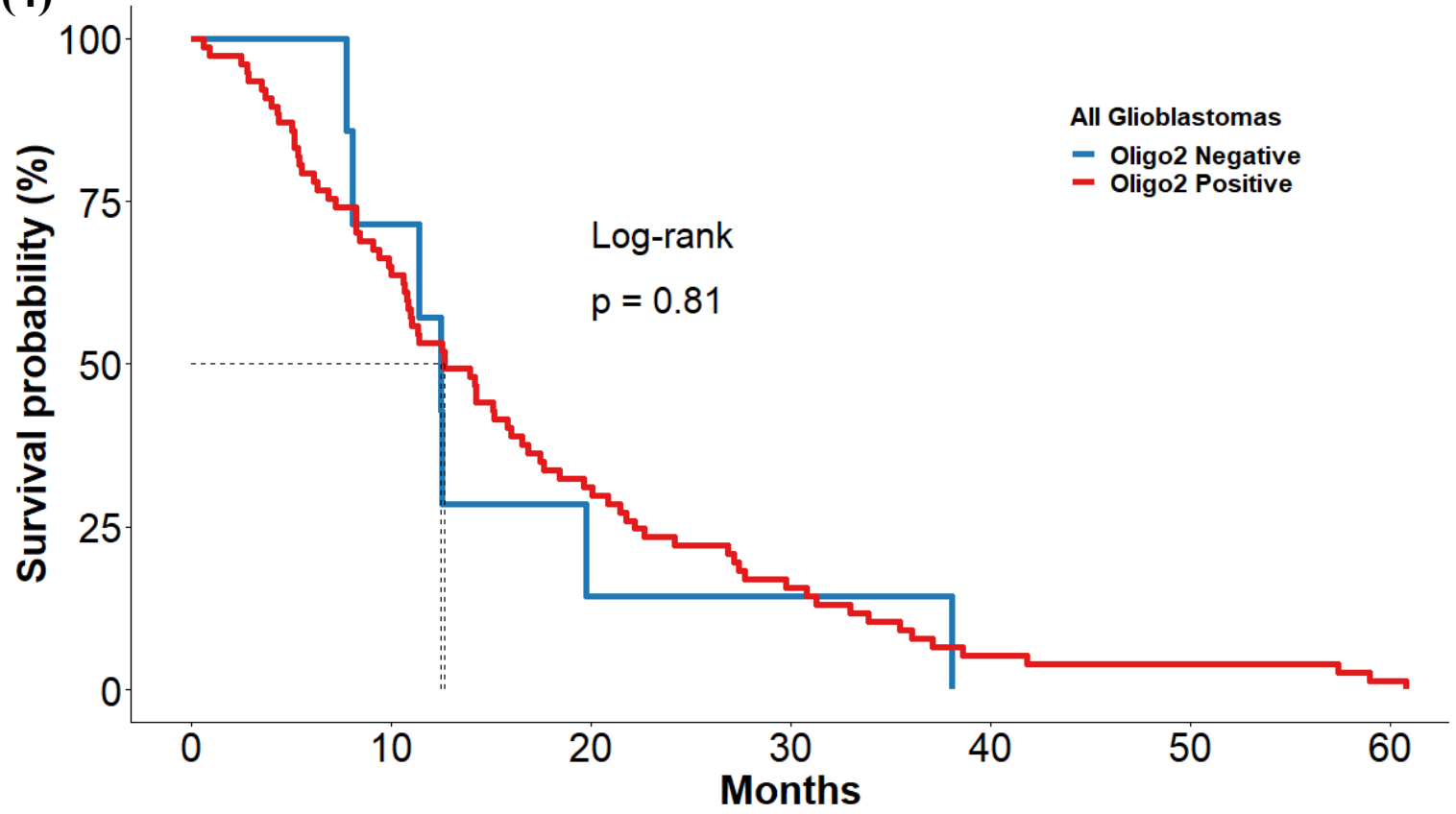
(2)


All Glioblastomas
NeuN Negative
NeuN Positive
Log-rank
p = 0.17
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
60 14 3 2 0 0 0
26 12 2 1 1 1 1

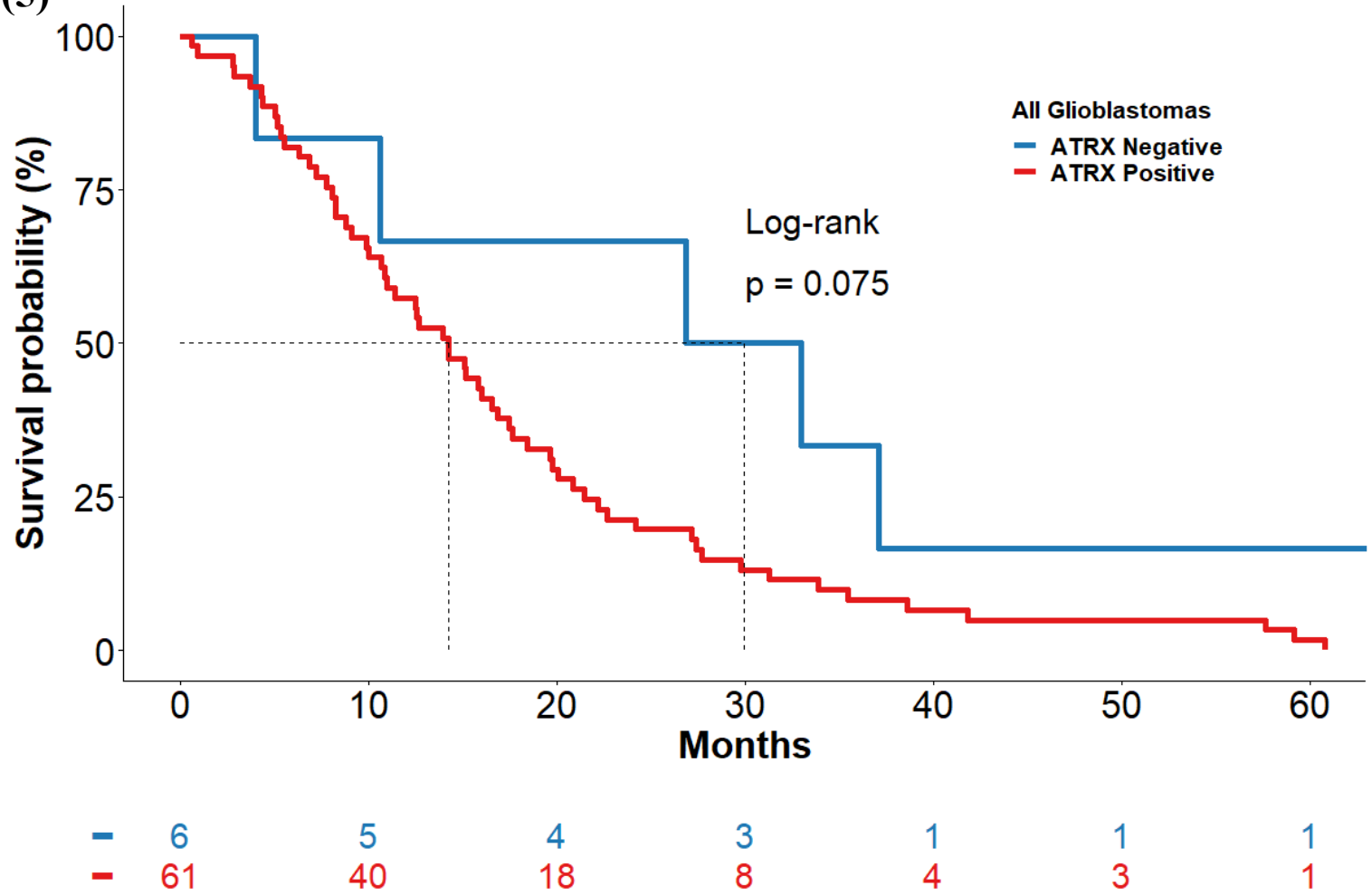
(3)


All Glioblastomas
Syn Negative
Syn Positive
Log-rank
p = 0.23
Survival probability (%)
100
75
50
25
0
0
10
20
30
40
50
60
Months
16 11 6 3 3 2 2
56 38 16 6 0 0 0

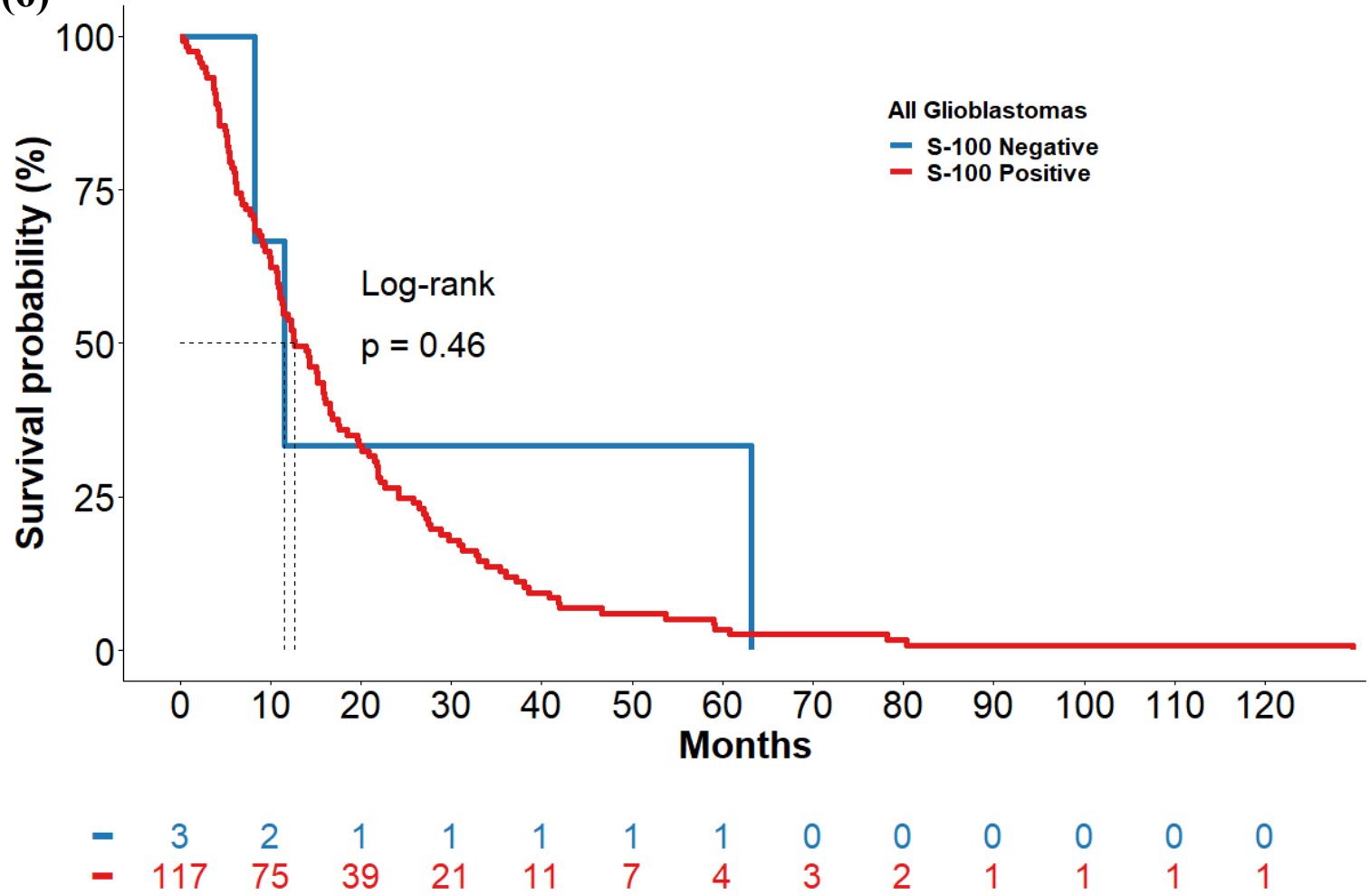
(4)


All Glioblastomas
Oligo2 Negative
Oligo2 Positive
Log-rank
p = 0.81
Survival probability (%)
100
75
50
25
0
0
10
20
30
40
50
60
Months
7 5 1 1 0 0 0
77 50 24 12 4 3 1

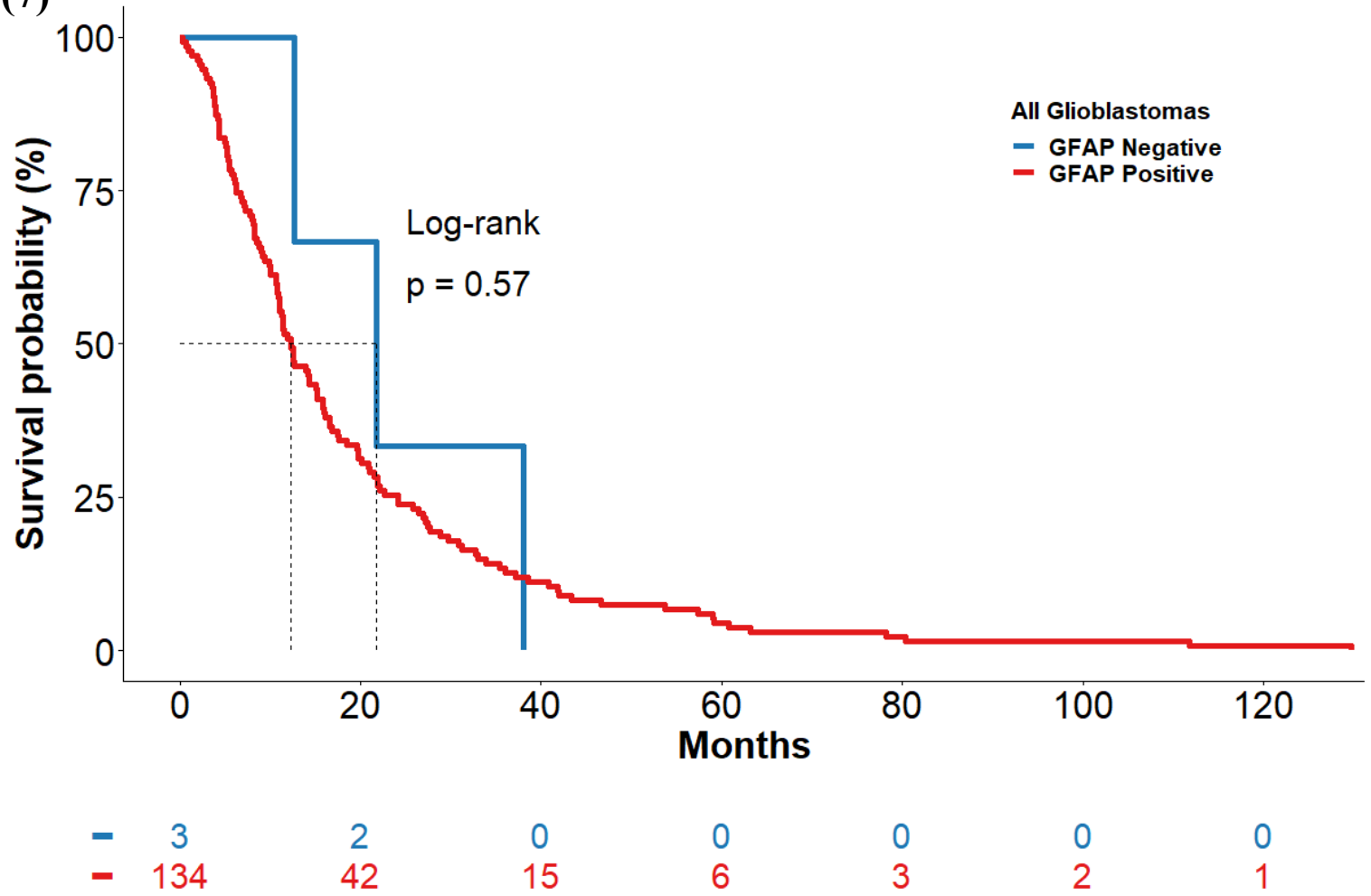
(5)


All Glioblastomas
ATRX Negative
ATRX Positive
Log-rank
p = 0.075
Survival probability (%)
100
75
50
25
0
0
10
20
30
40
50
60
Months
6 5 4 3 1 1 1
61 40 18 8 4 3 1

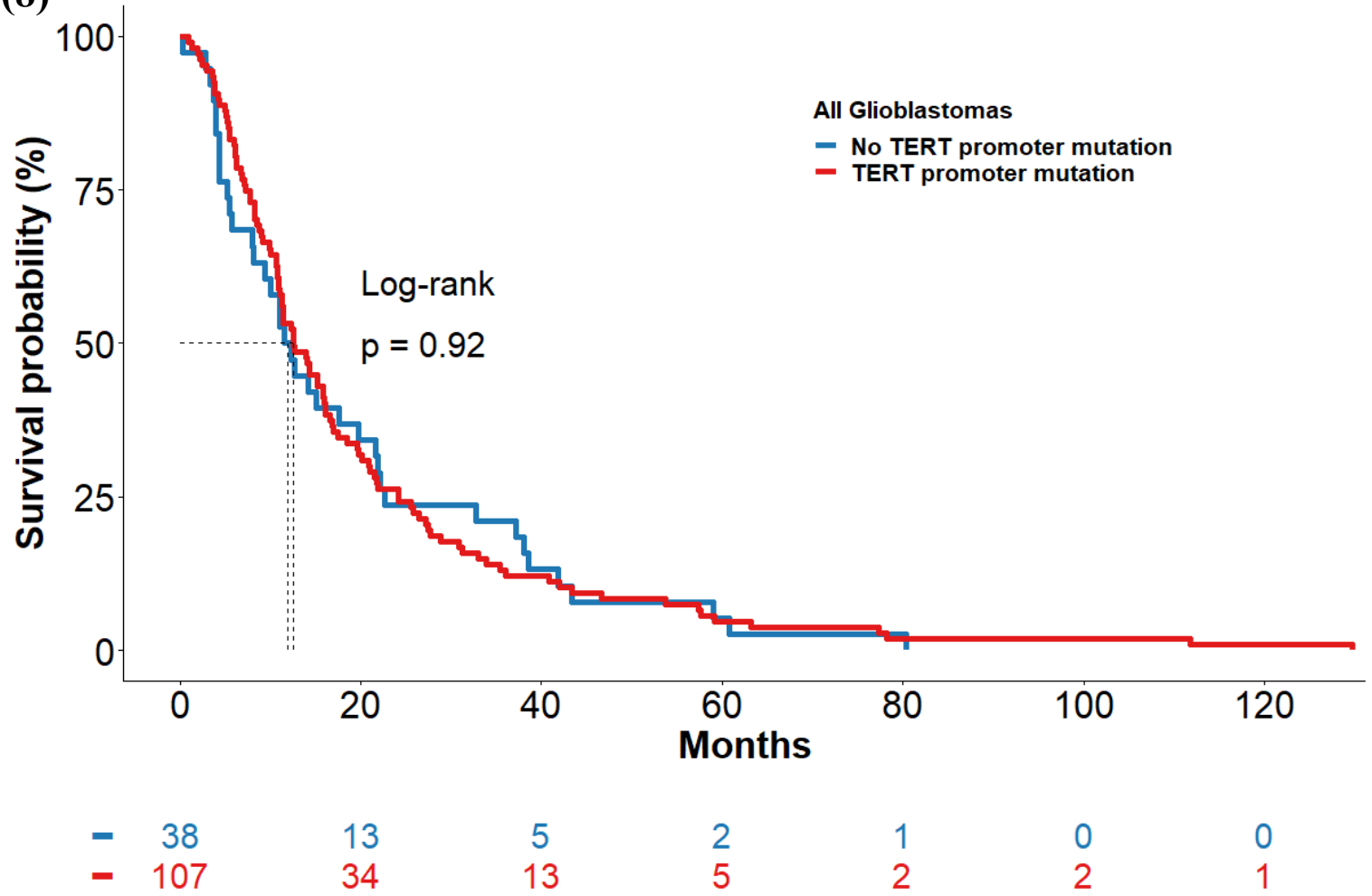
(6)


All Glioblastomas
S-100 Negative
S-100 Positive
Log-rank
p = 0.46
Survival probability (%)
100
75
50
25
0
0 10 20 30 40 50 60 70 80 90 100 110 120
Months
3 2 1 1 1 1 1 0 0 0 0 0 0
117 75 39 21 11 7 4 3 2 1 1 1 1

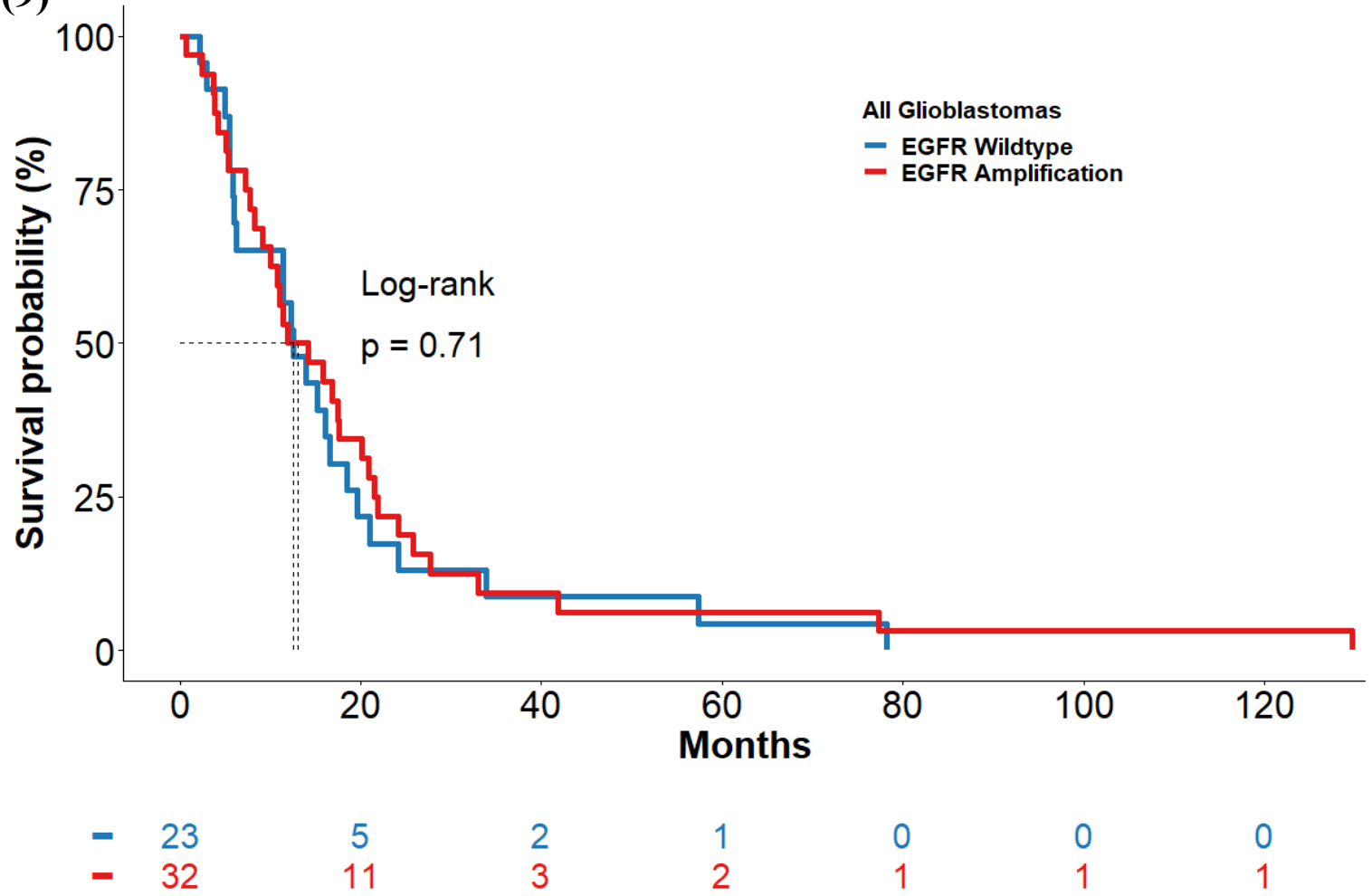
(7)


All Glioblastomas
GFAP Negative
GFAP Positive
Log-rank
p = 0.57
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
3 2 0 0 0 0 0
134 42 15 6 3 2 1

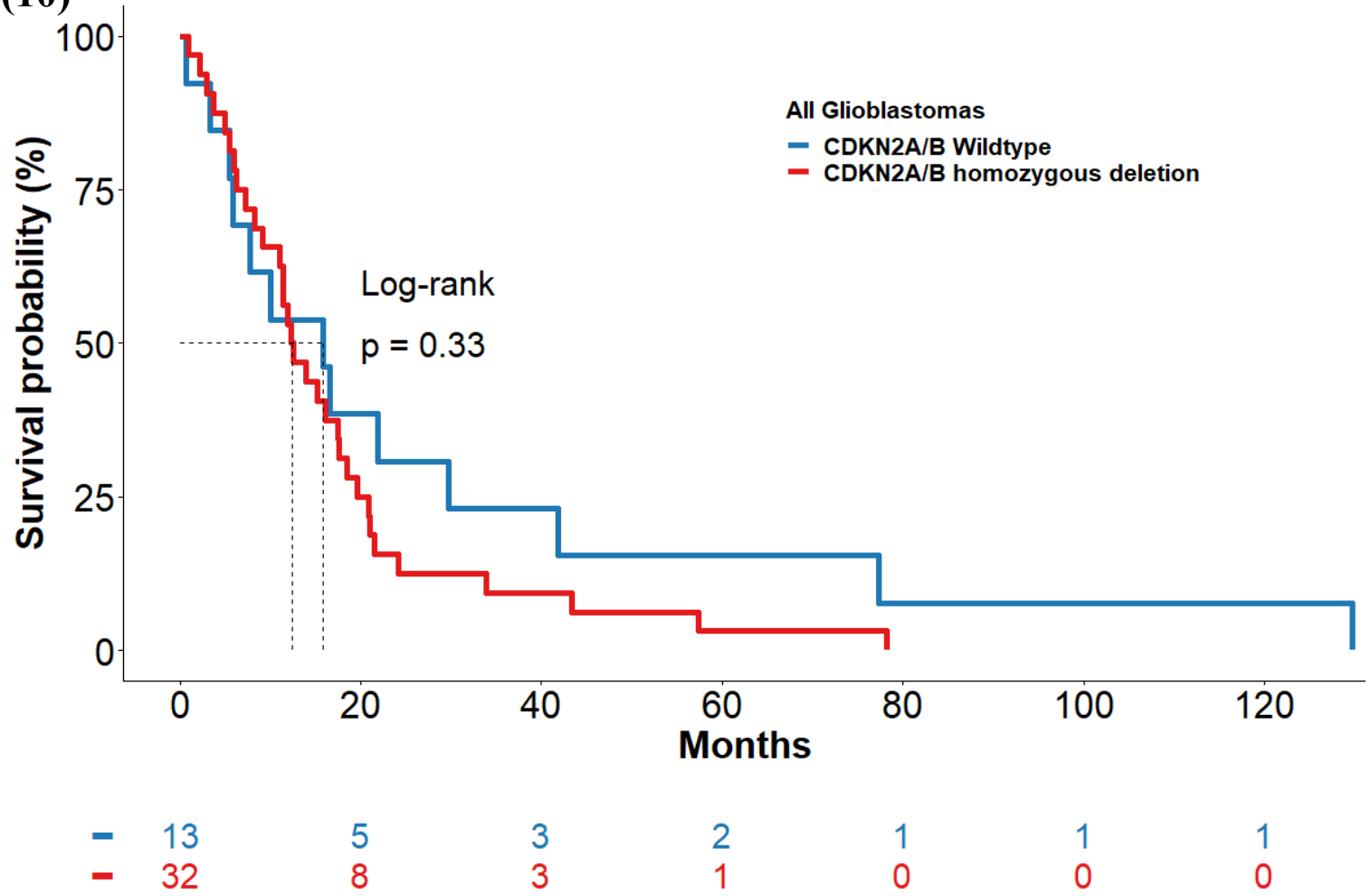
(8)


All Glioblastomas
No TERT promoter mutation
TERT promoter mutation
Log-rank
p = 0.92
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
38 13 5 2 1 0 0
107 34 13 5 2 2 1

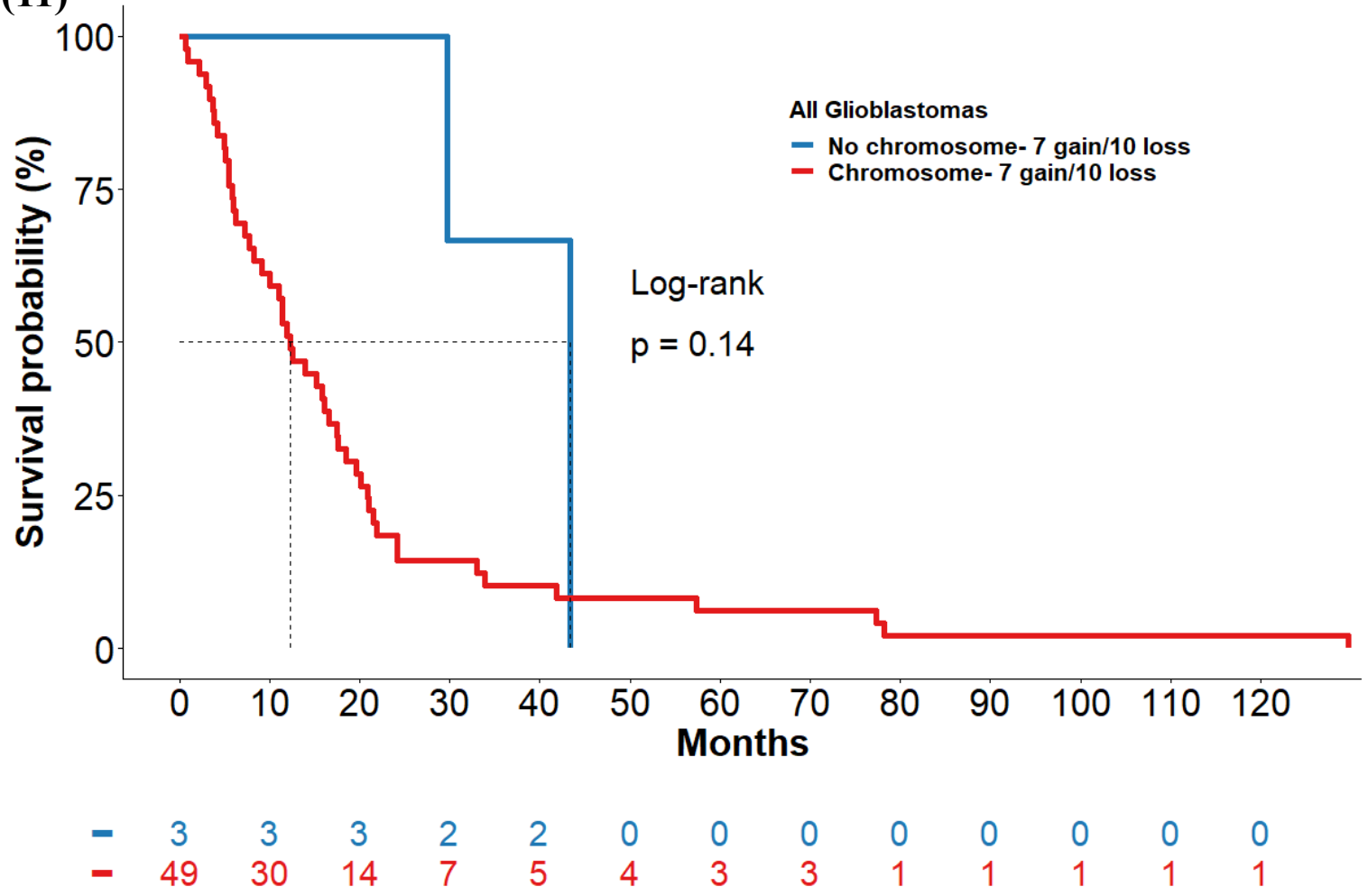
(9)


All Glioblastomas
EGFR Wildtype
EGFR Amplification
Survival probability (%)
100
75
50
25
0
Log-rank
p = 0.71
0
20
40
60
80
100
120
Months
23 5 2 1 0 0 0
32 11 3 2 1 1 1

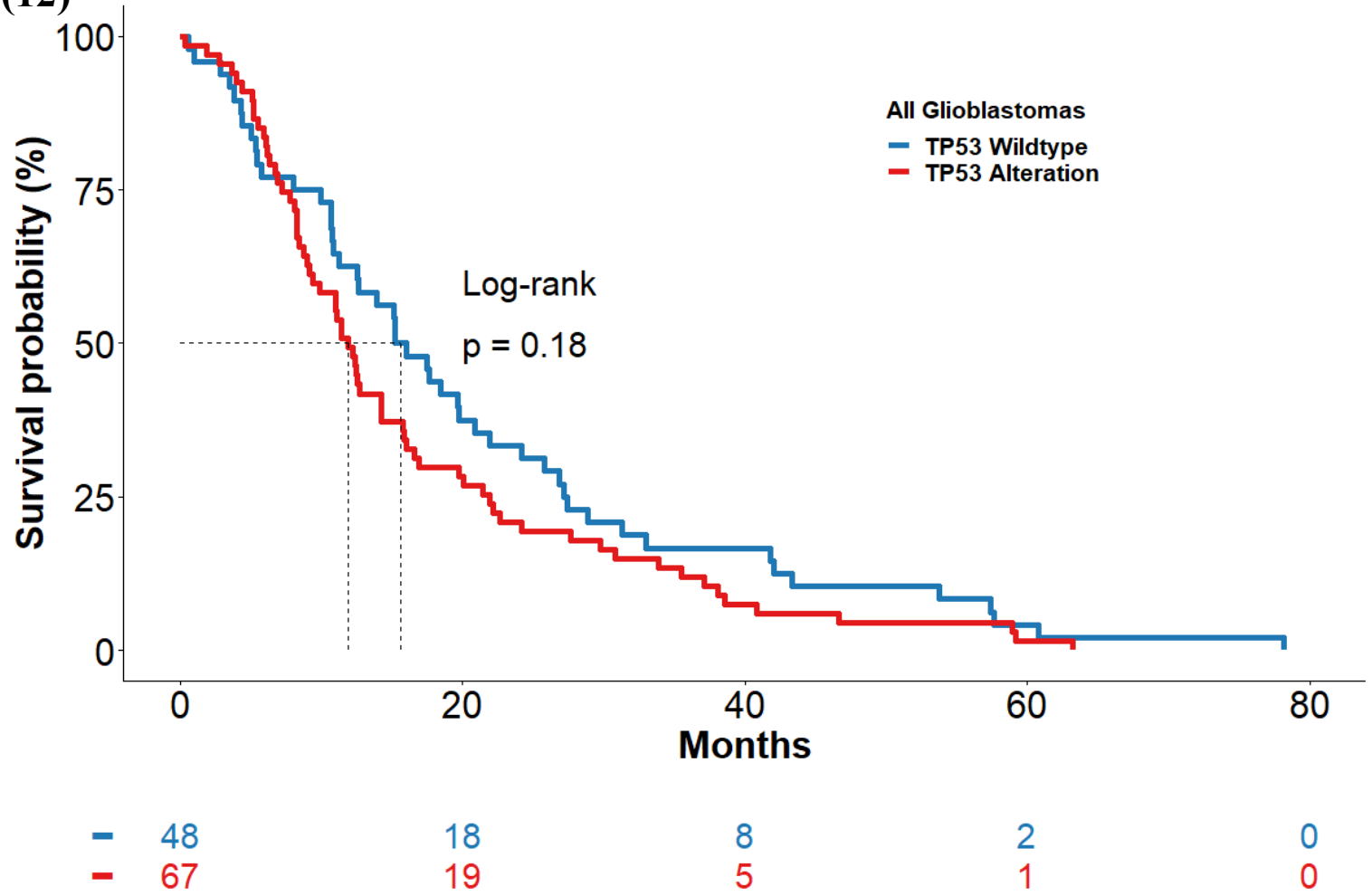
(10)


All Glioblastomas
CDKN2A/B Wildtype
CDKN2A/B homozygous deletion
Survival probability (%)
100
75
50
25
0
Log-rank
p = 0.33
0
20
40
60
80
100
120
Months
13 5 3 2 1 1 1
32 8 3 1 0 0 0

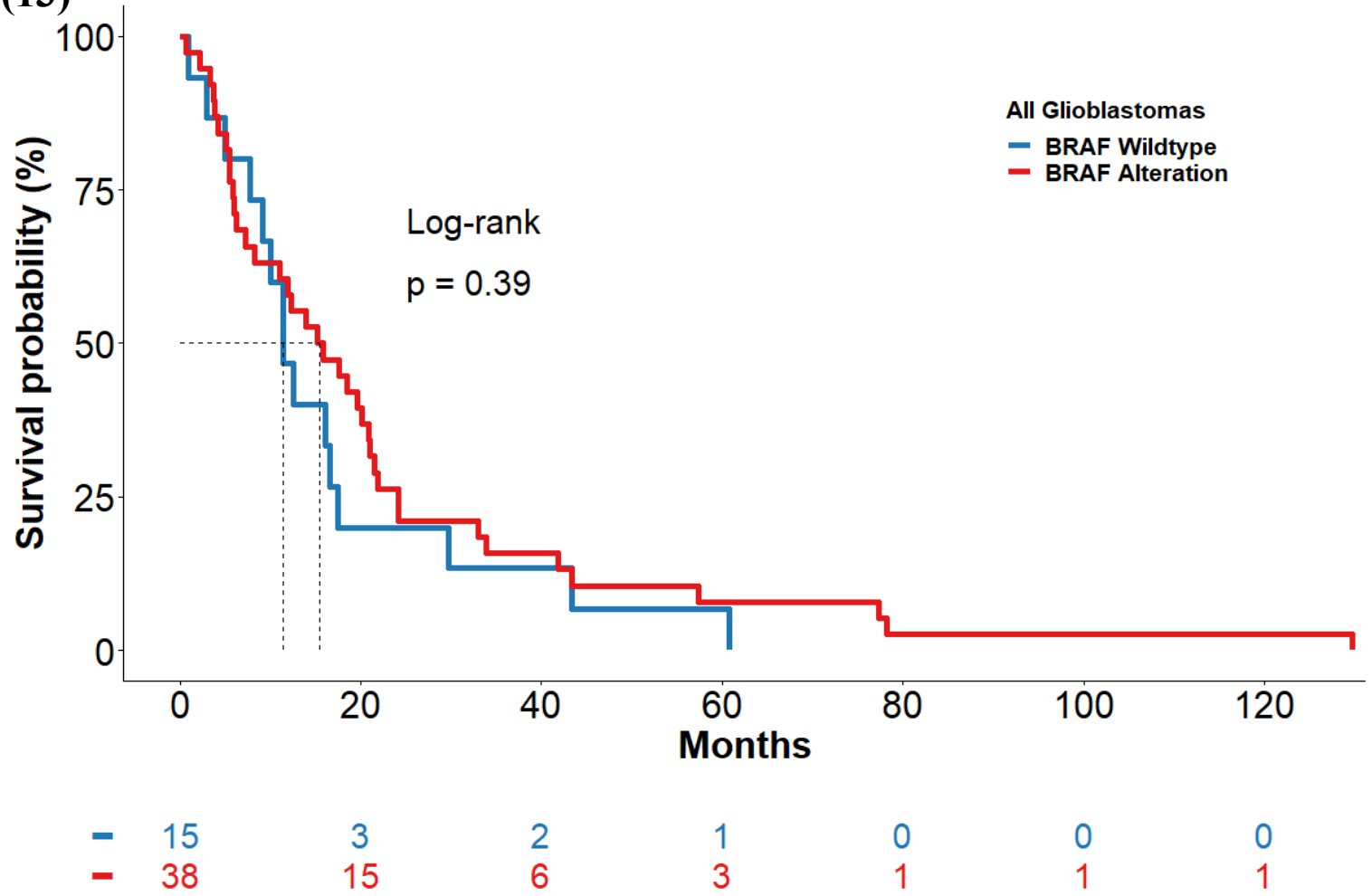
(11)


All Glioblastomas
No chromosome- 7 gain/10 loss
Chromosome- 7 gain/10 loss
Log-rank
p = 0.14
Survival probability (%)
100
75
50
25
0
0 10 20 30 40 50 60 70 80 90 100 110 120
Months
3 3 3 2 2 0 0 0 0 0 0 0 0
49 30 14 7 5 4 3 3 1 1 1 1 1

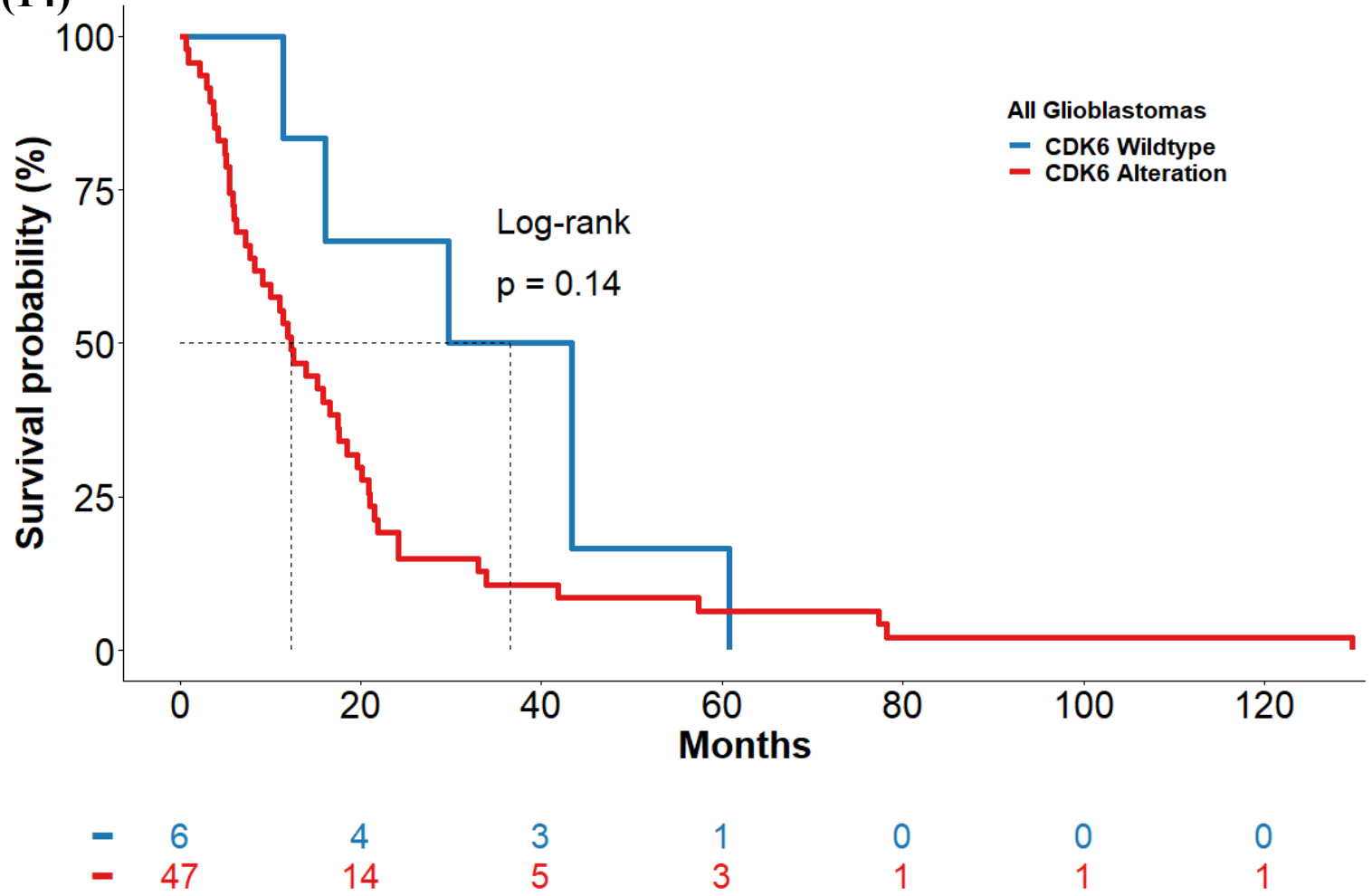
(12)


All Glioblastomas
TP53 Wildtype
TP53 Alteration
Log-rank
p = 0.18
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
Months
48
18
8
2
0
67
19
5
1
0

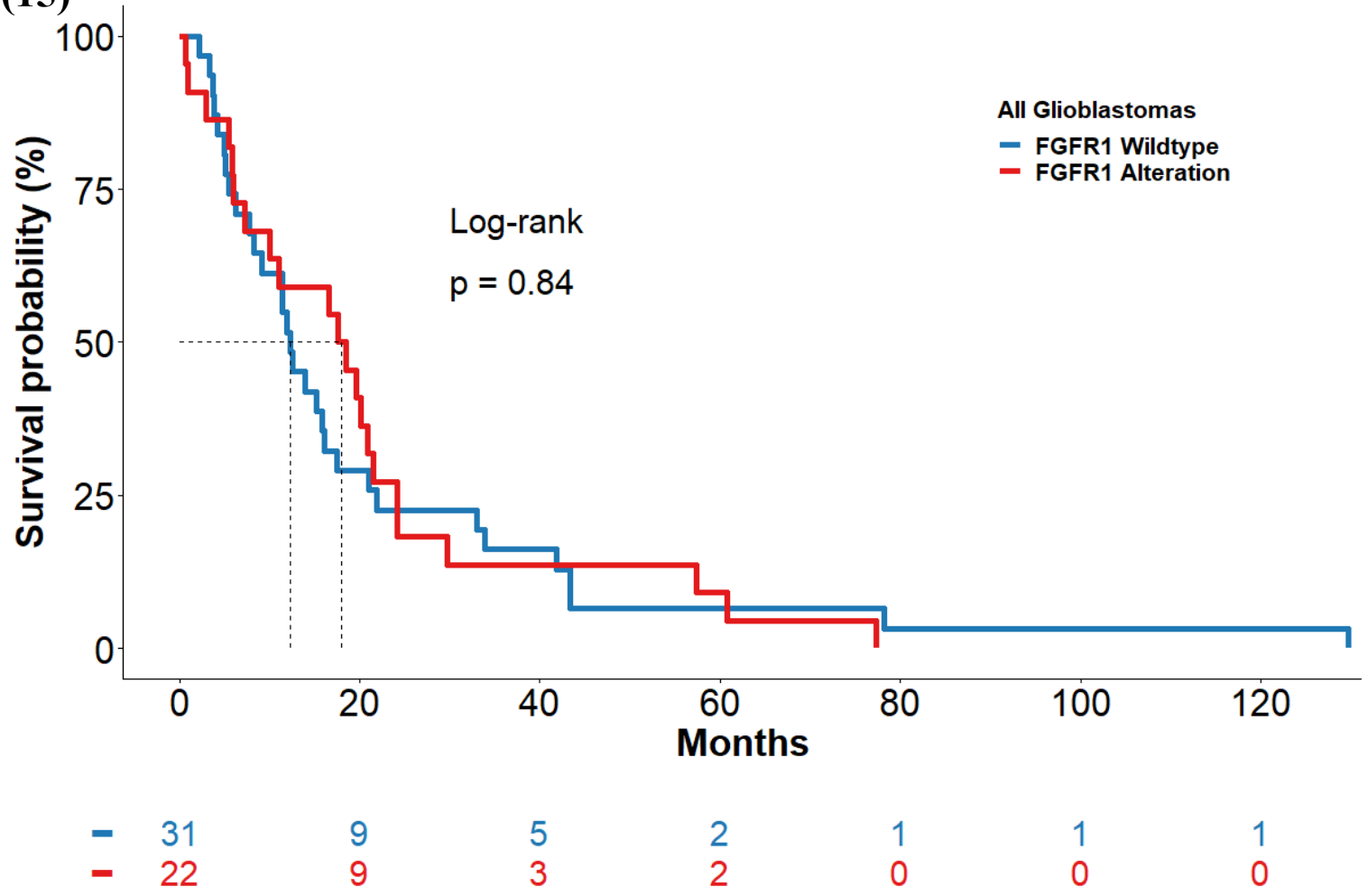
(13)


All Glioblastomas
BRAF Wildtype
BRAF Alteration
Log-rank
p = 0.39
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
15 3 2 1 0 0 0
38 15 6 3 1 1 1

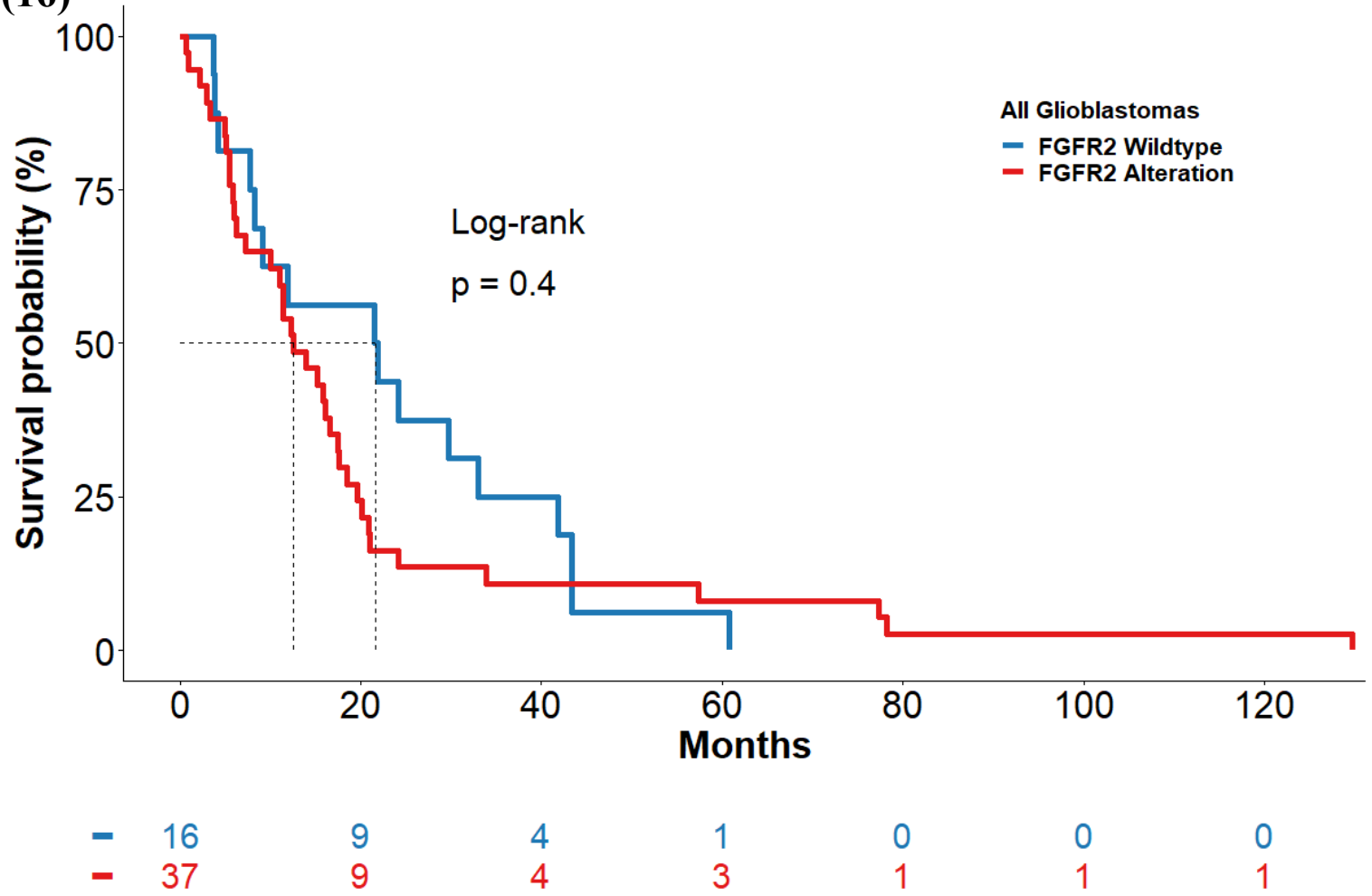
(14)


All Glioblastomas
CDK6 Wildtype
CDK6 Alteration
Log-rank
p = 0.14
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
6
4
3
1
0
0
0
47
14
5
3
1
1
1

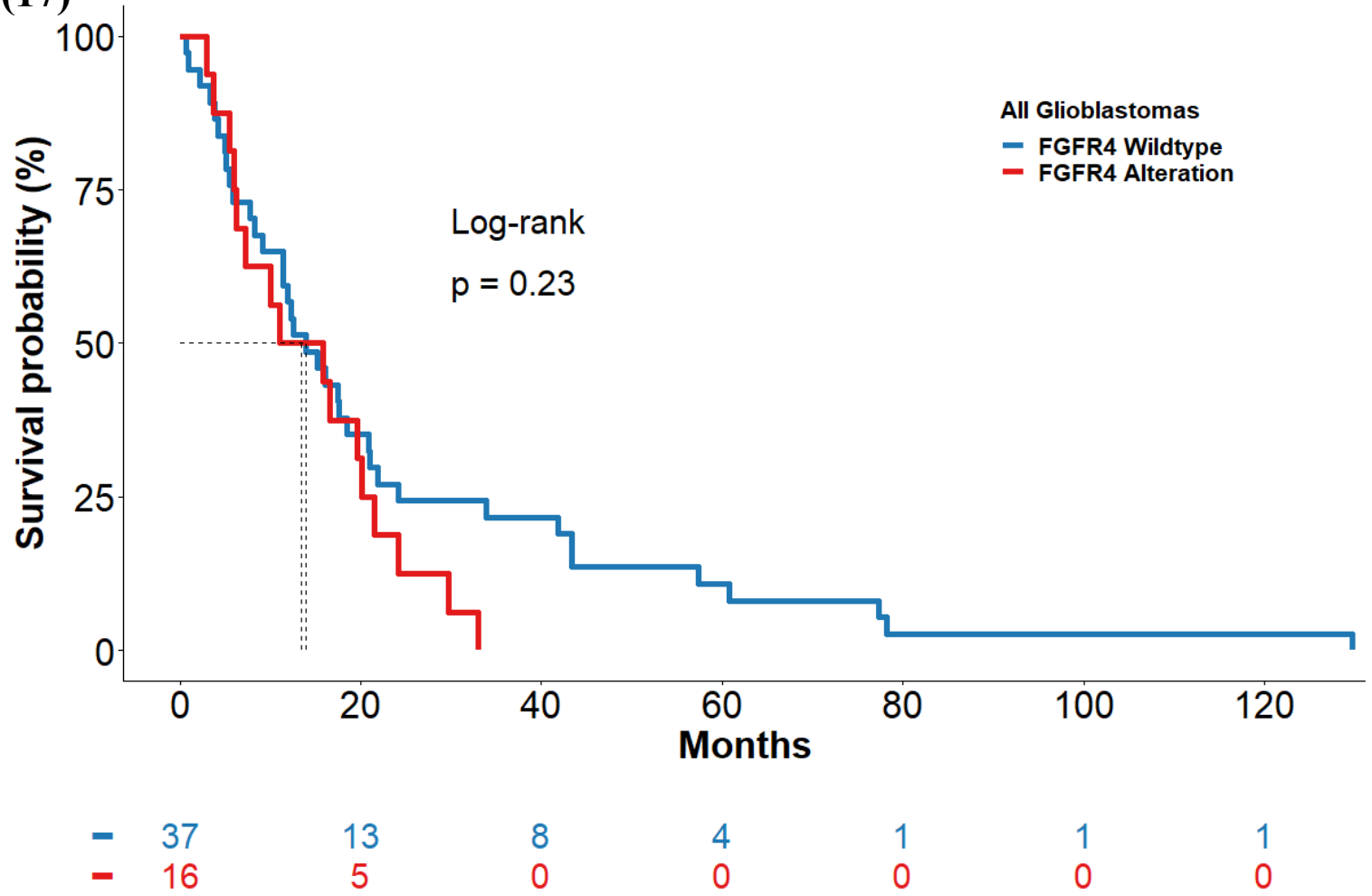
(15)


All Glioblastomas
FGFR1 Wildtype
FGFR1 Alteration
Log-rank
p = 0.84
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
31 9 5 2 1 1 1
22 9 3 2 0 0 0

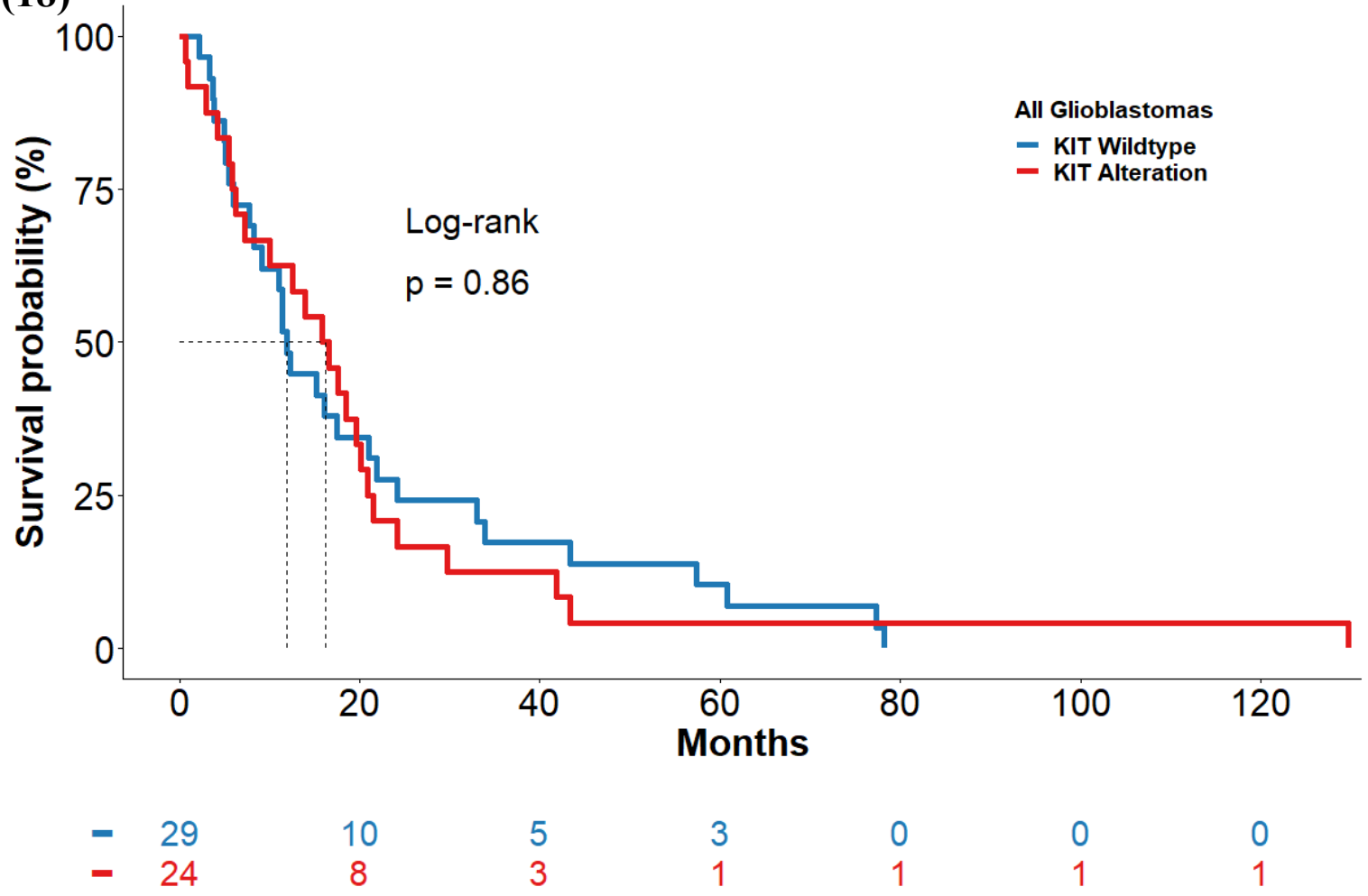
(16)


All Glioblastomas
FGFR2 Wildtype
FGFR2 Alteration
Log-rank
p = 0.4
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
16 9 4 1 0 0 0
37 9 4 3 1 1 1

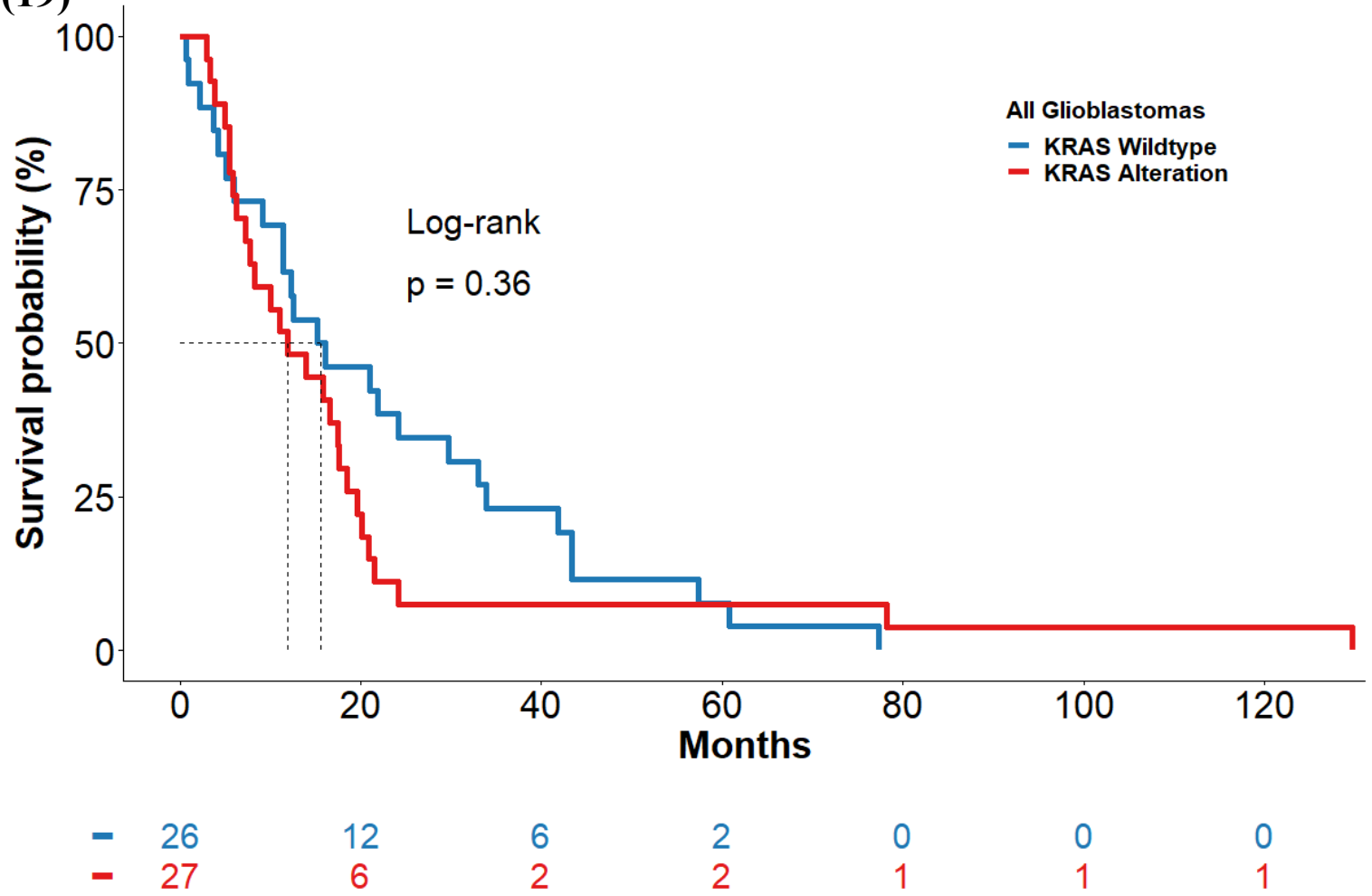
(17)


All Glioblastomas
FGFR4 Wildtype
FGFR4 Alteration
Log-rank
p = 0.23
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
37 13 8 4 1 1 1
16 5 0 0 0 0 0

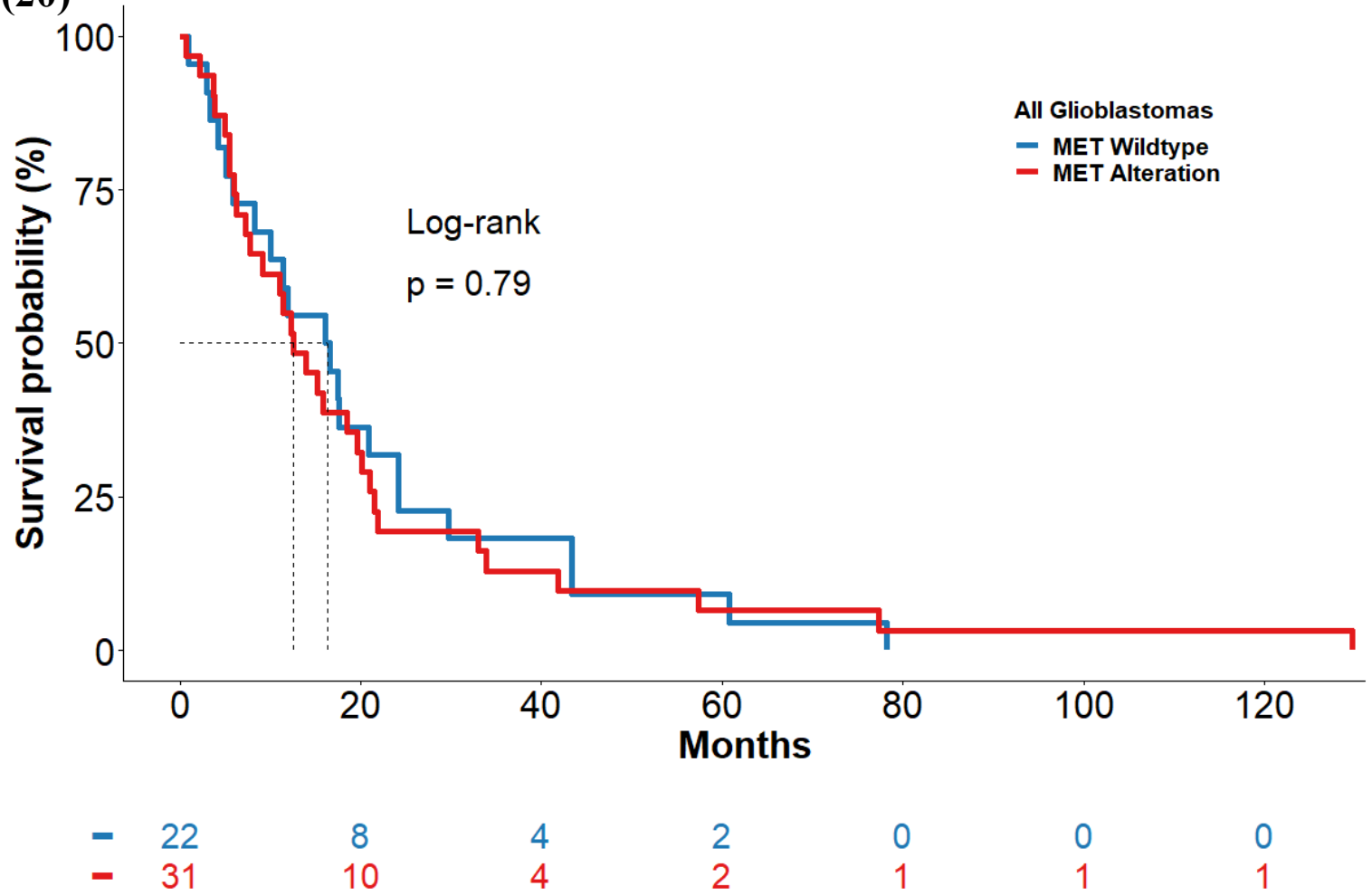
(18)


All Glioblastomas
KIT Wildtype
KIT Alteration
Log-rank
p = 0.86
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
29 10 5 3 0 0 0
24 8 3 1 1 1 1

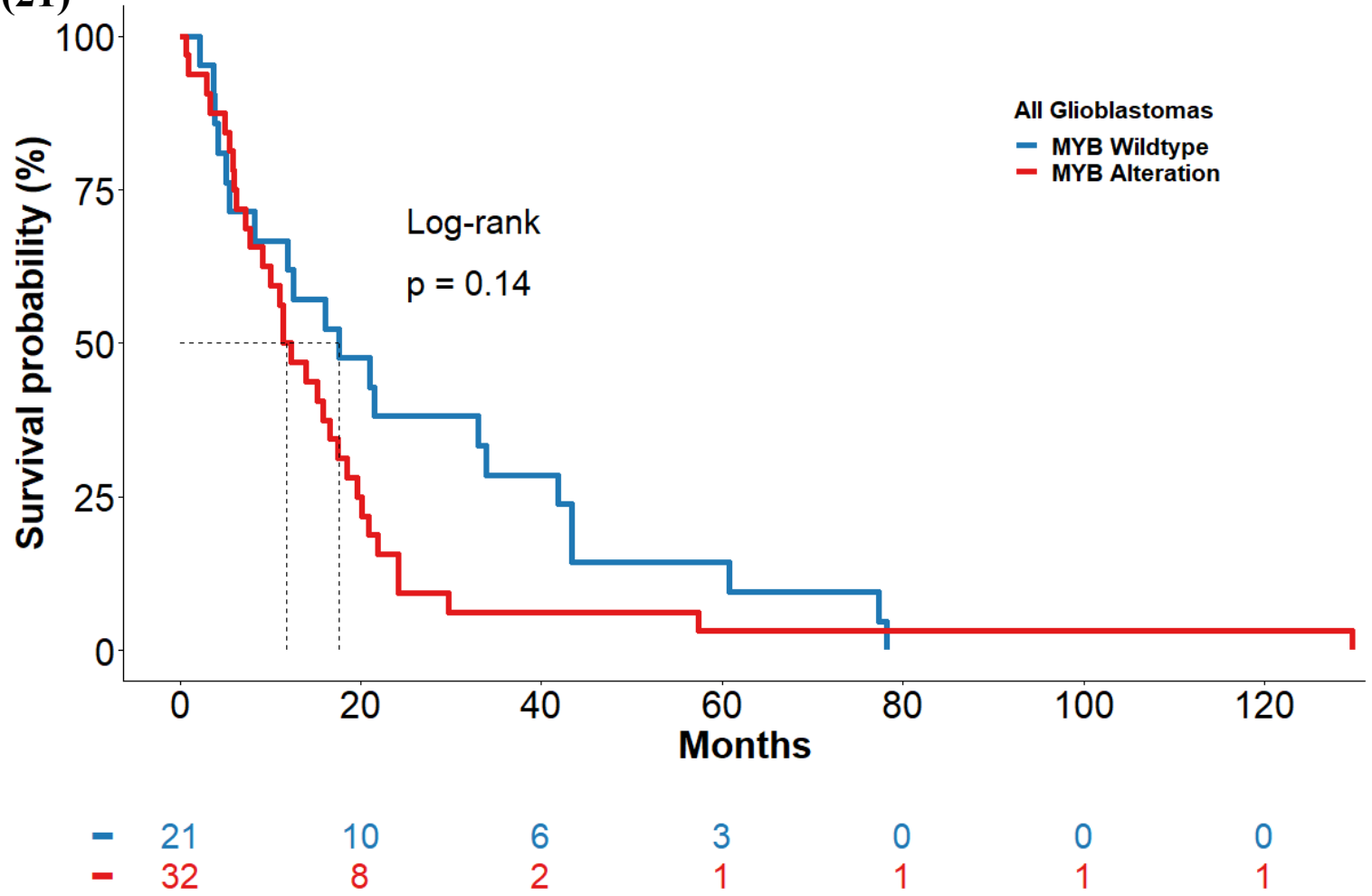
(19)


All Glioblastomas
KRAS Wildtype
KRAS Alteration
Log-rank
p = 0.36
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
26 12 6 2 0 0 0
27 6 2 2 1 1 1

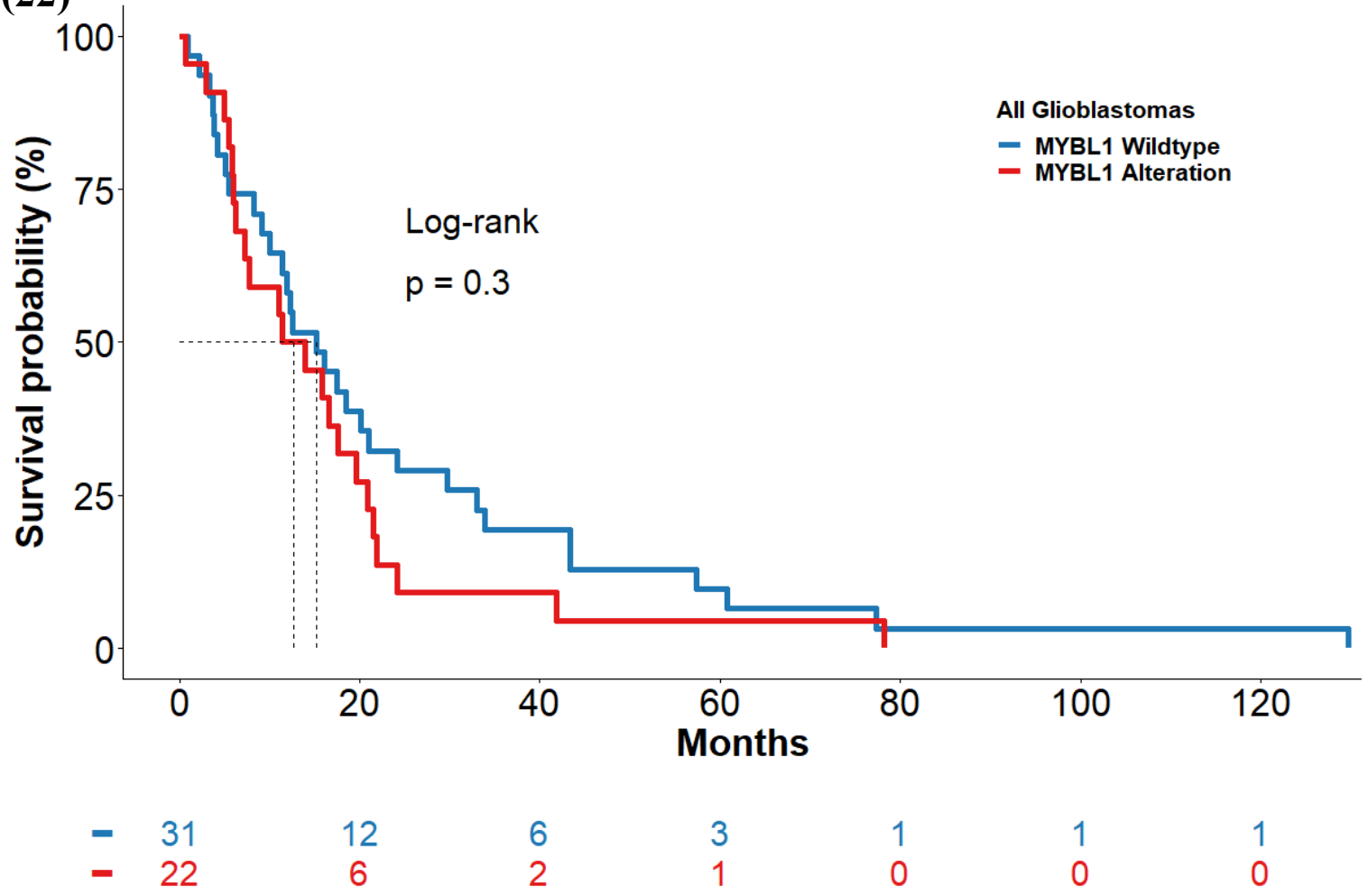
(20)


All Glioblastomas
MET Wildtype
MET Alteration
Log-rank
p = 0.79
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
22 8 4 2 0 0 0
31 10 4 2 1 1 1

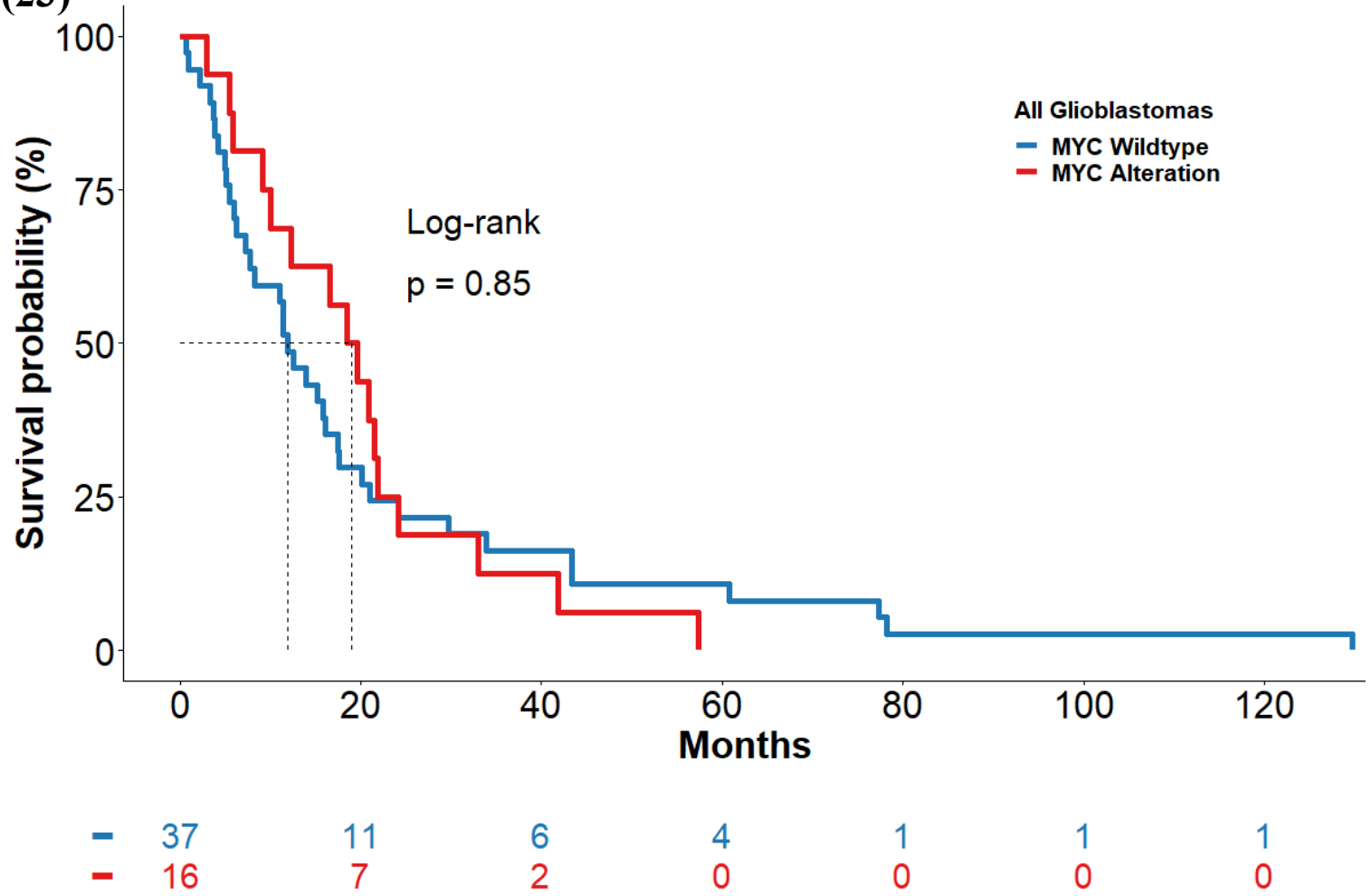
(21)


All Glioblastomas
MYB Wildtype
MYB Alteration
Log-rank
p = 0.14
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
21 10 6 3 0 0 0
32 8 2 1 1 1 1

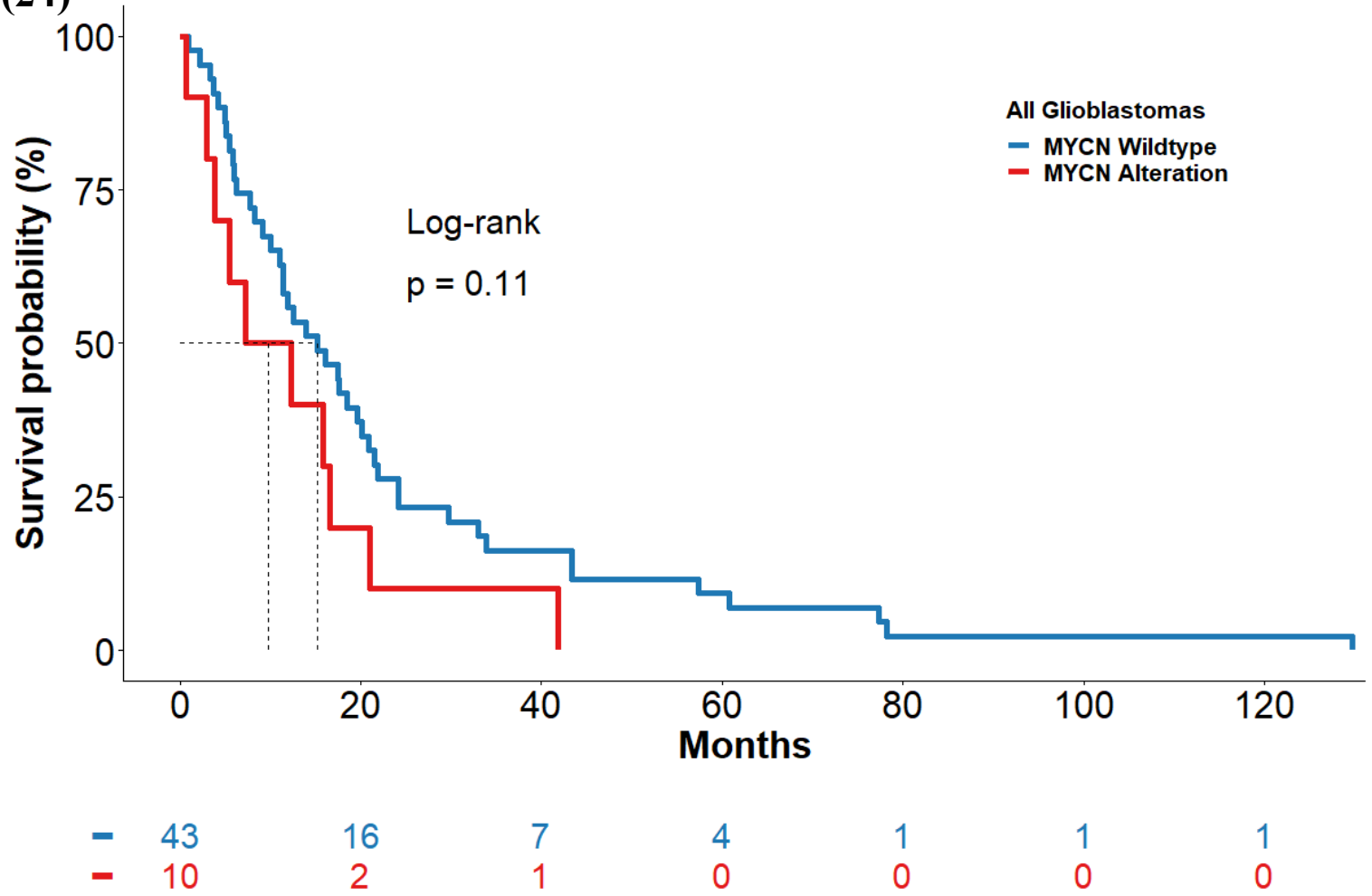
(22)


All Glioblastomas
MYBL1 Wildtype
MYBL1 Alteration
Log-rank
p = 0.3
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
31 12 6 3 1 1 1
22 6 2 1 0 0 0

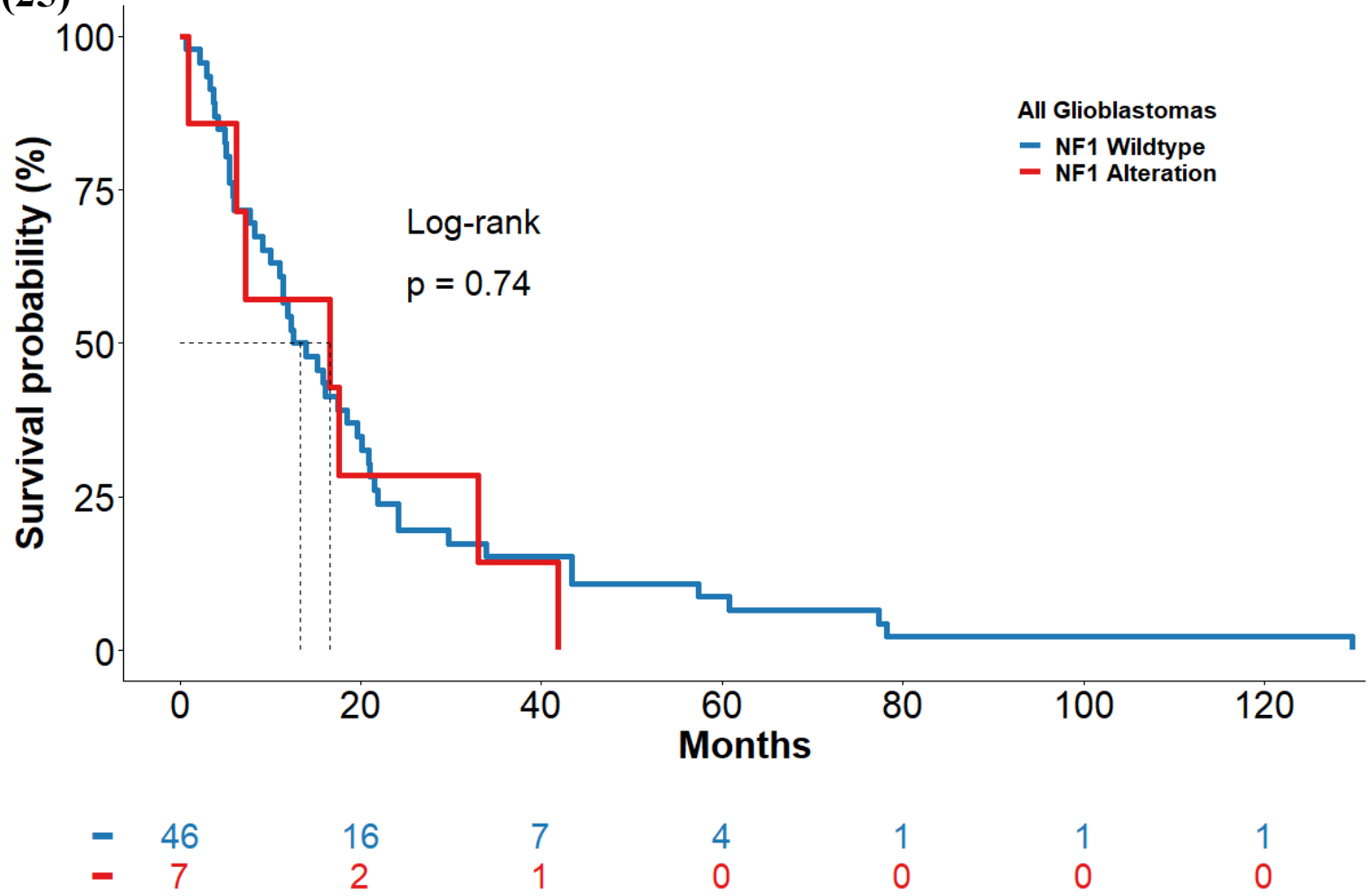
(23)


All Glioblastomas
MYC Wildtype
MYC Alteration
Log-rank
p = 0.85
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
37 11 6 4 1 1 1
16 7 2 0 0 0 0

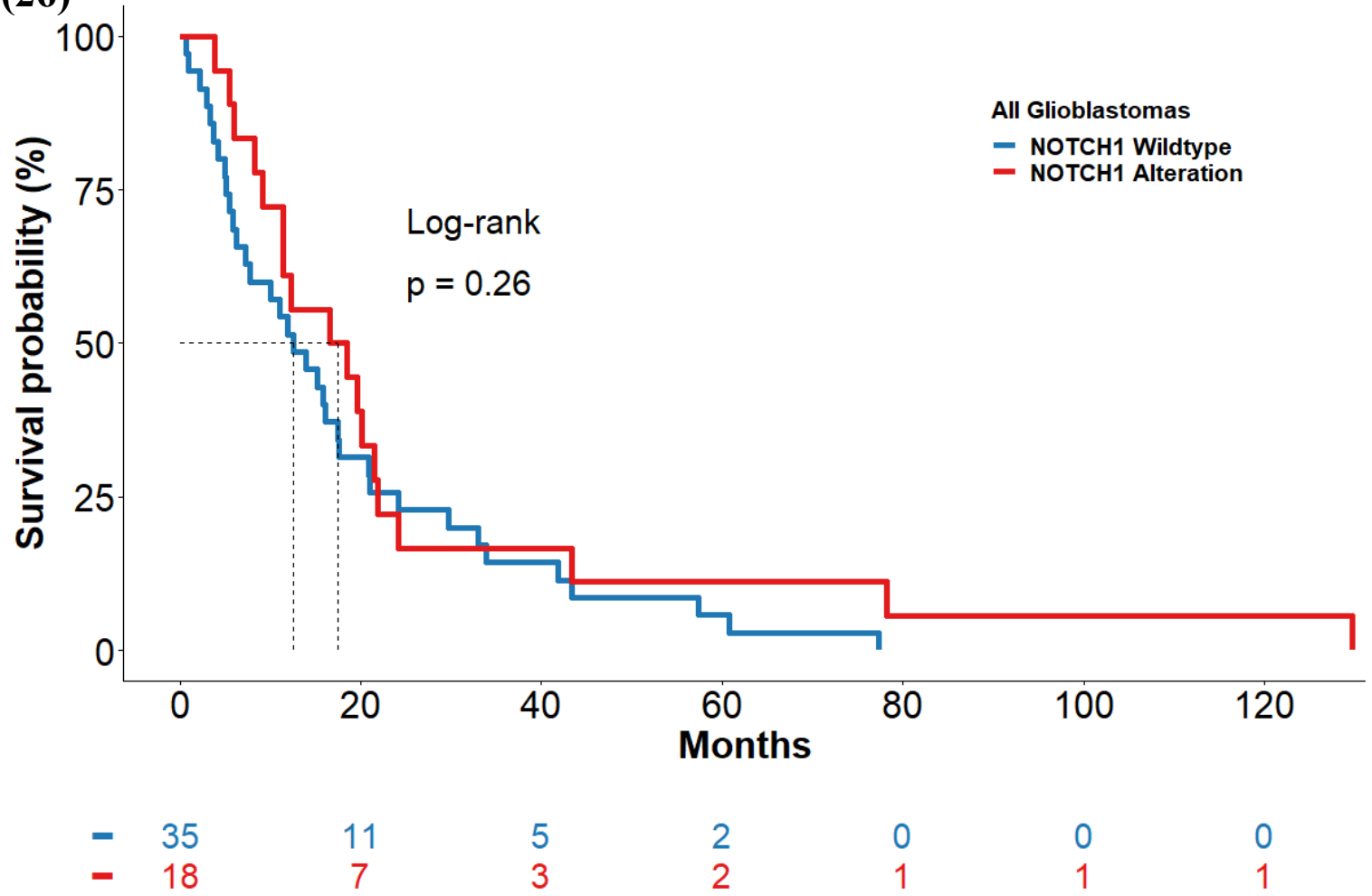
(24)


All Glioblastomas
MYCN Wildtype
MYCN Alteration
Log-rank
p = 0.11
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
43 16 7 4 1 1 1
10 2 1 0 0 0 0

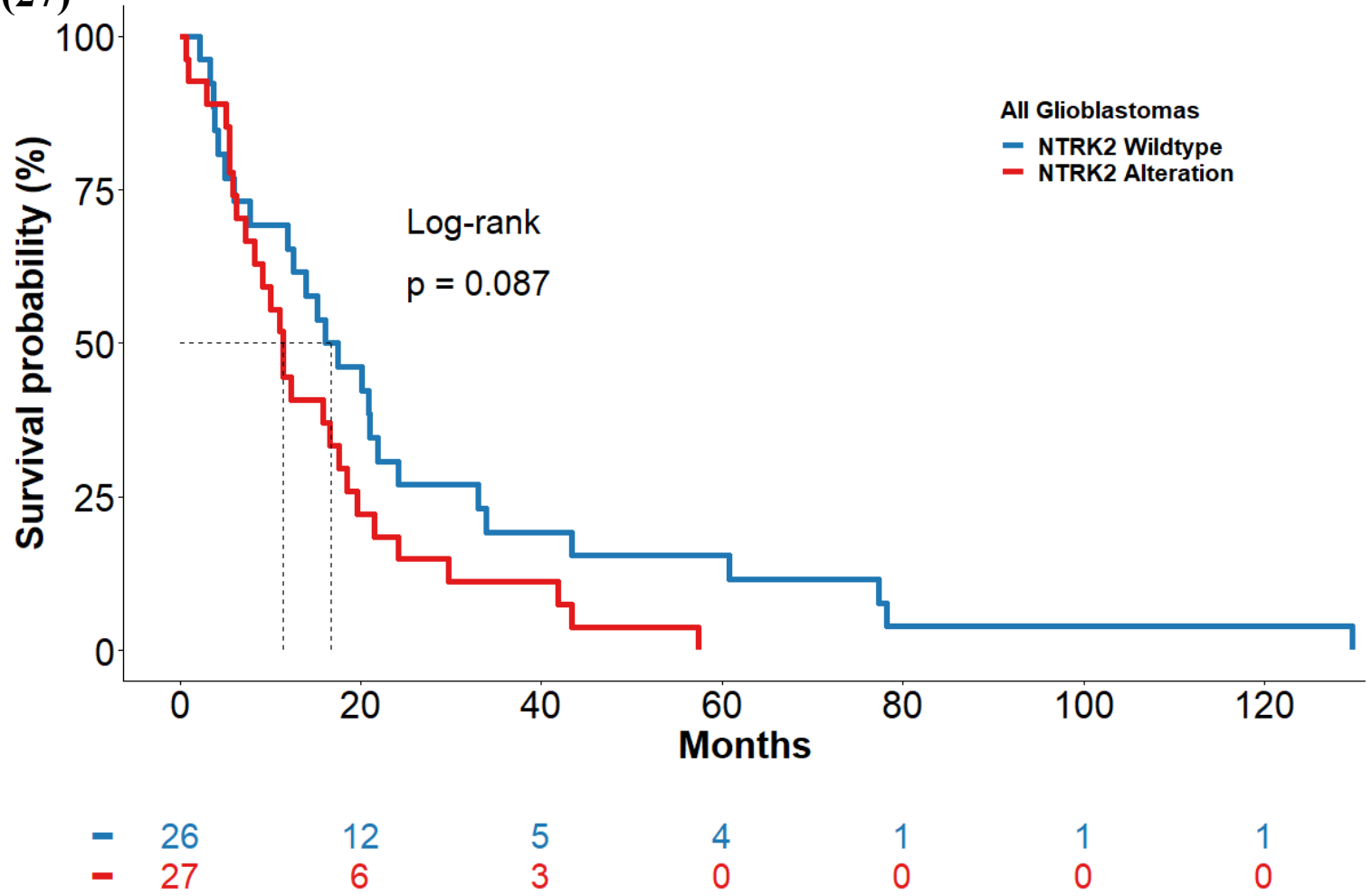
(25)


All Glioblastomas
NF1 Wildtype
NF1 Alteration
Log-rank
p = 0.74
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
46 16 7 4 1 1 1
7 2 1 0 0 0 0

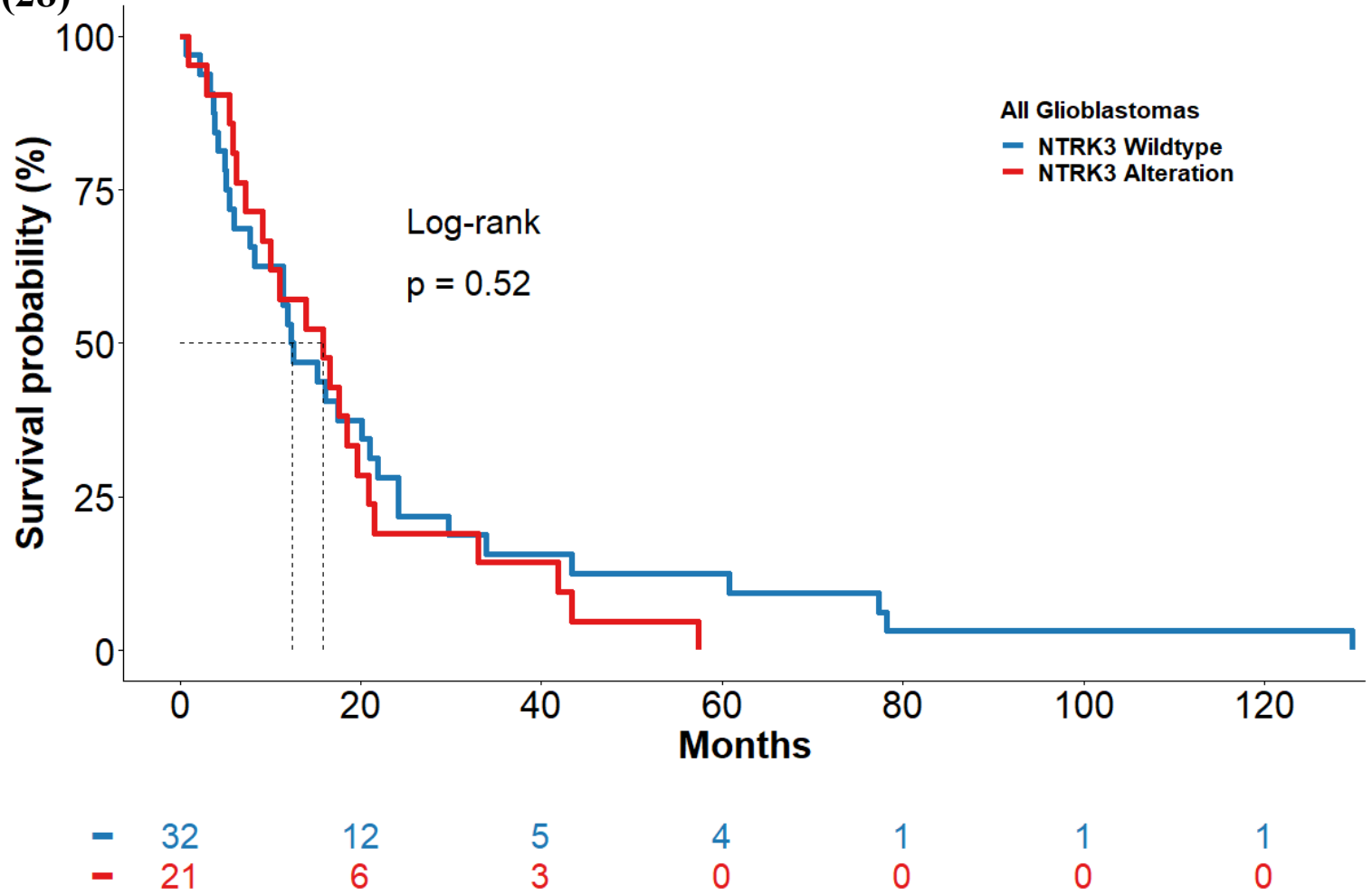
(26)


All Glioblastomas
NOTCH1 Wildtype
NOTCH1 Alteration
Log-rank
p = 0.26
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
35 11 5 2 0 0 0
18 7 3 2 1 1 1

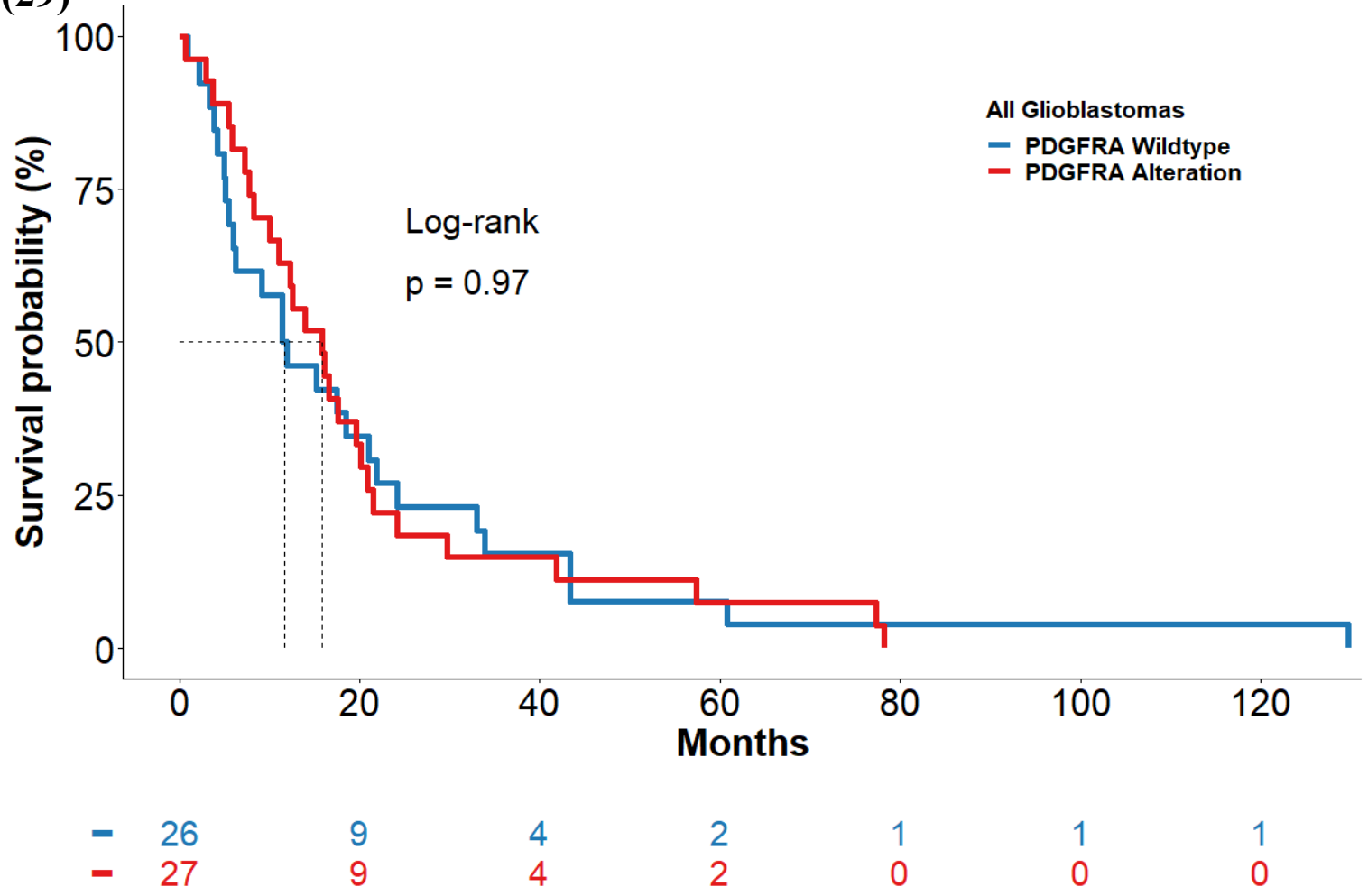
(27)


All Glioblastomas
NTRK2 Wildtype
NTRK2 Alteration
Log-rank
p = 0.087
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
26 12 5 4 1 1 1
27 6 3 0 0 0 0

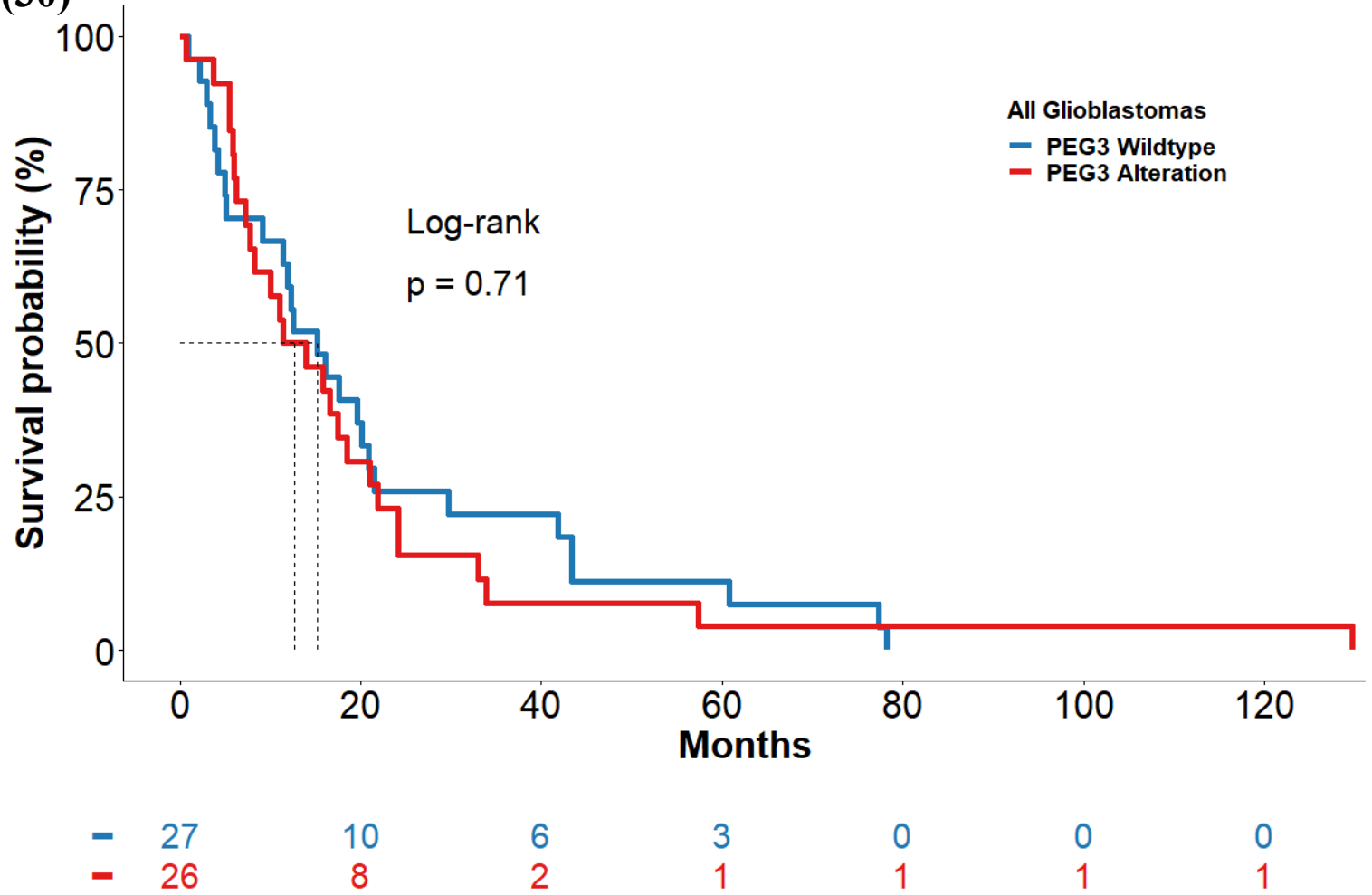
(28)


All Glioblastomas
NTRK3 Wildtype
NTRK3 Alteration
Log-rank
p = 0.52
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
32 12 5 4 1 1 1
21 6 3 0 0 0 0

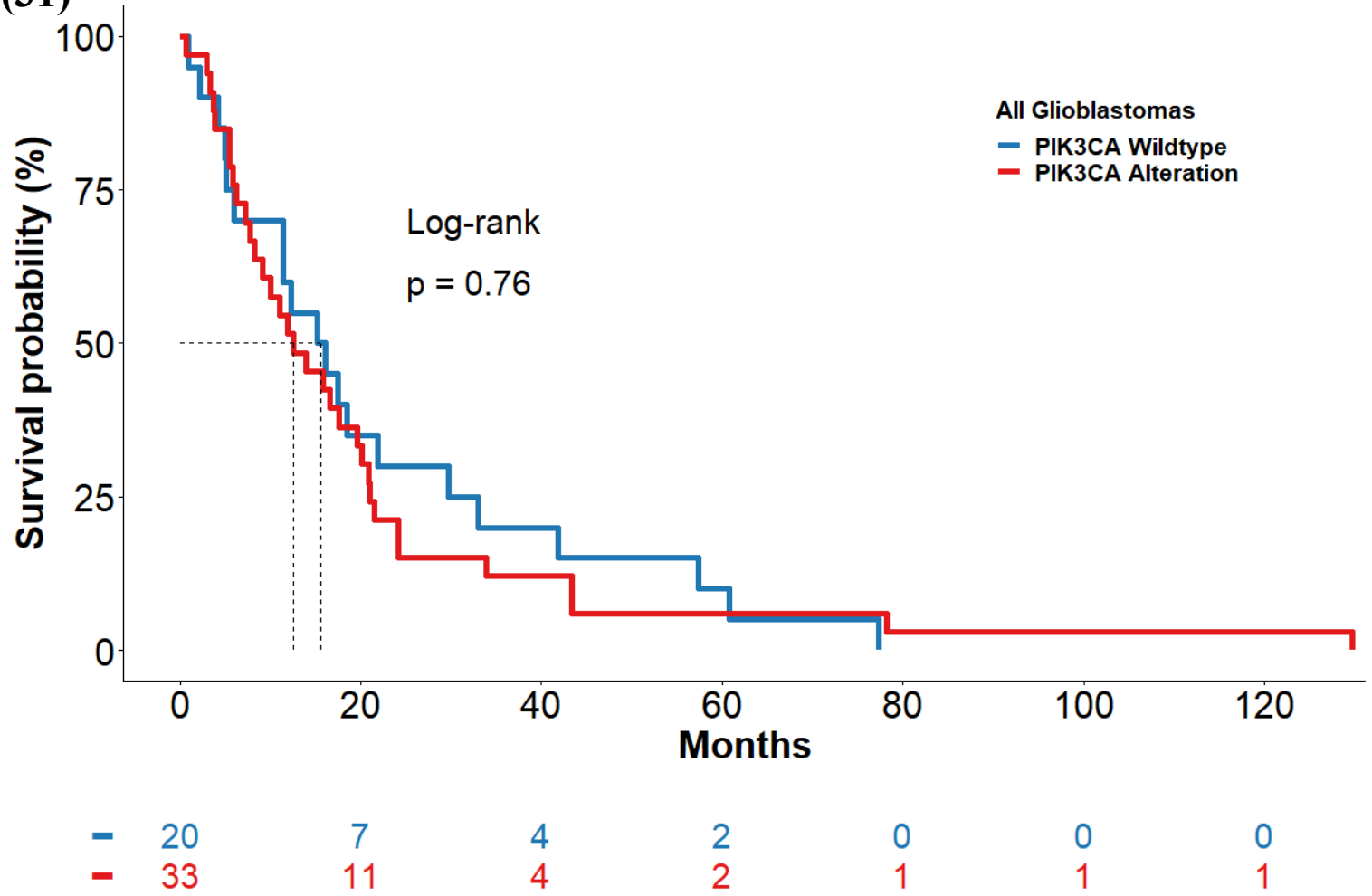
(29)


All Glioblastomas
PDGFRA Wildtype
PDGFRA Alteration
Log-rank
p = 0.97
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
26 9 4 2 1 1 1
27 9 4 2 0 0 0

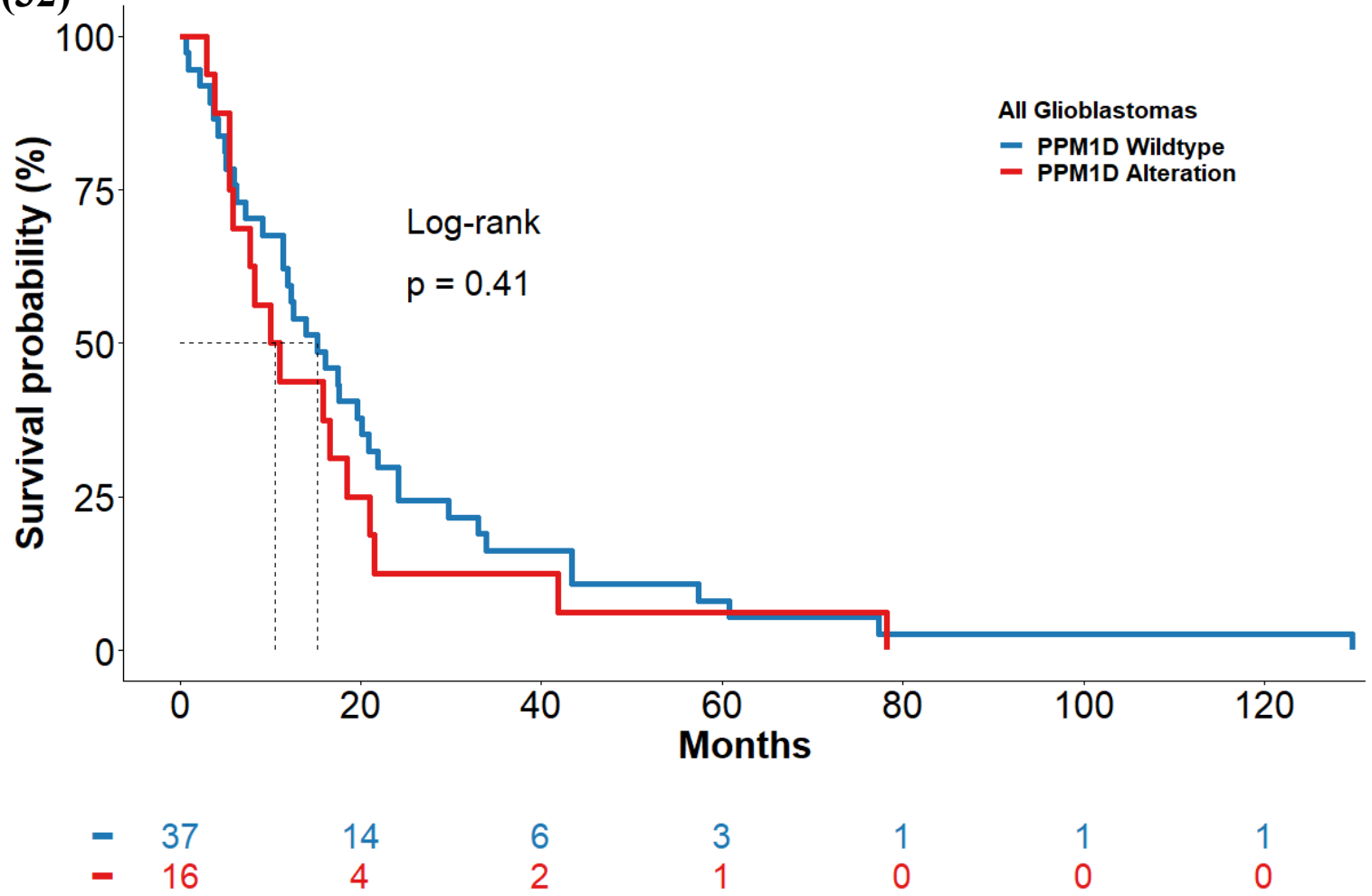
(30)


All Glioblastomas
PEG3 Wildtype
PEG3 Alteration
Log-rank
p = 0.71
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
27 10 6 3 0 0 0
26 8 2 1 1 1 1

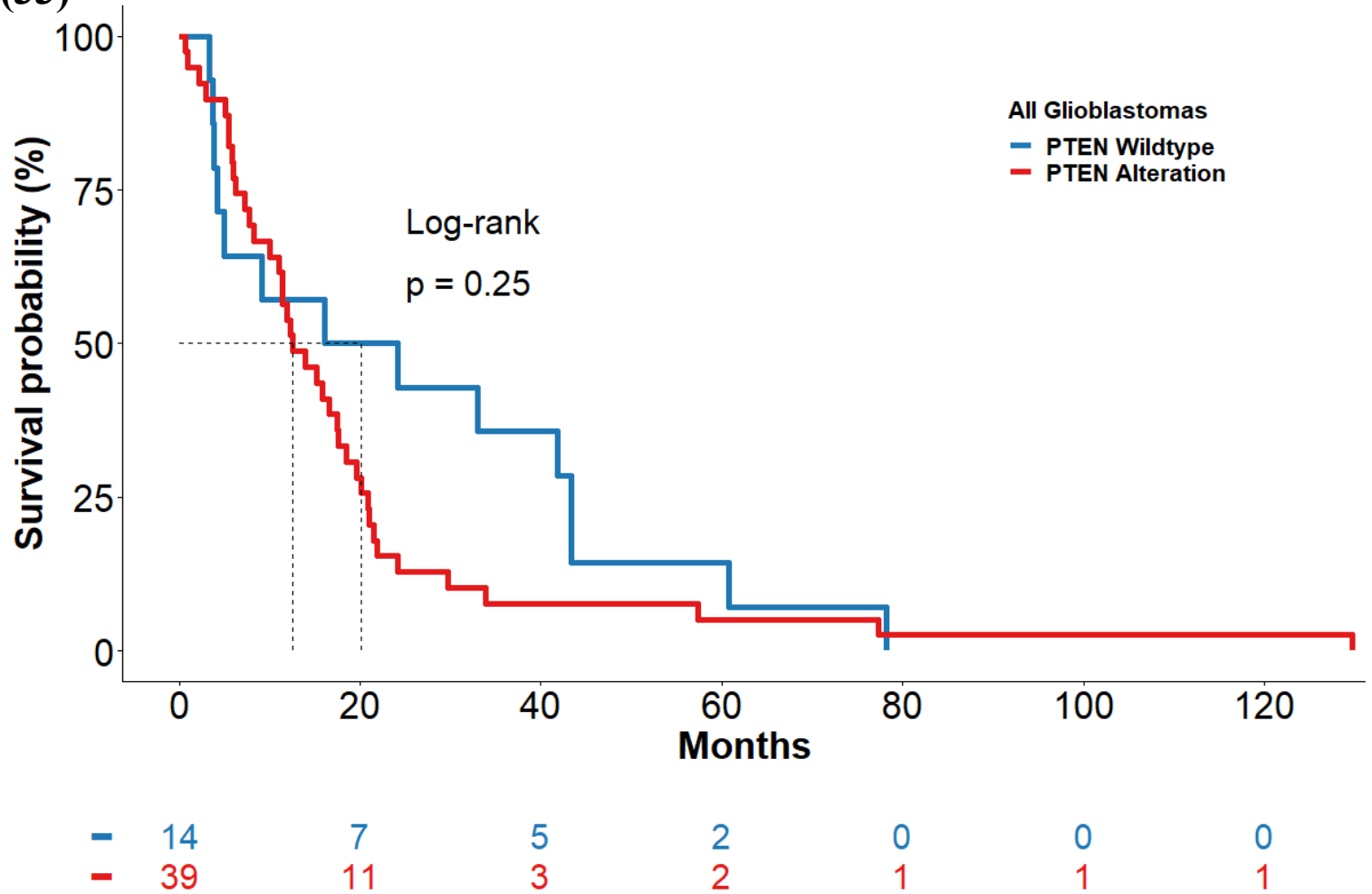
(31)


All Glioblastomas
PIK3CA Wildtype
PIK3CA Alteration
Log-rank
p = 0.76
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
20 7 4 2 0 0 0
33 11 4 2 1 1 1

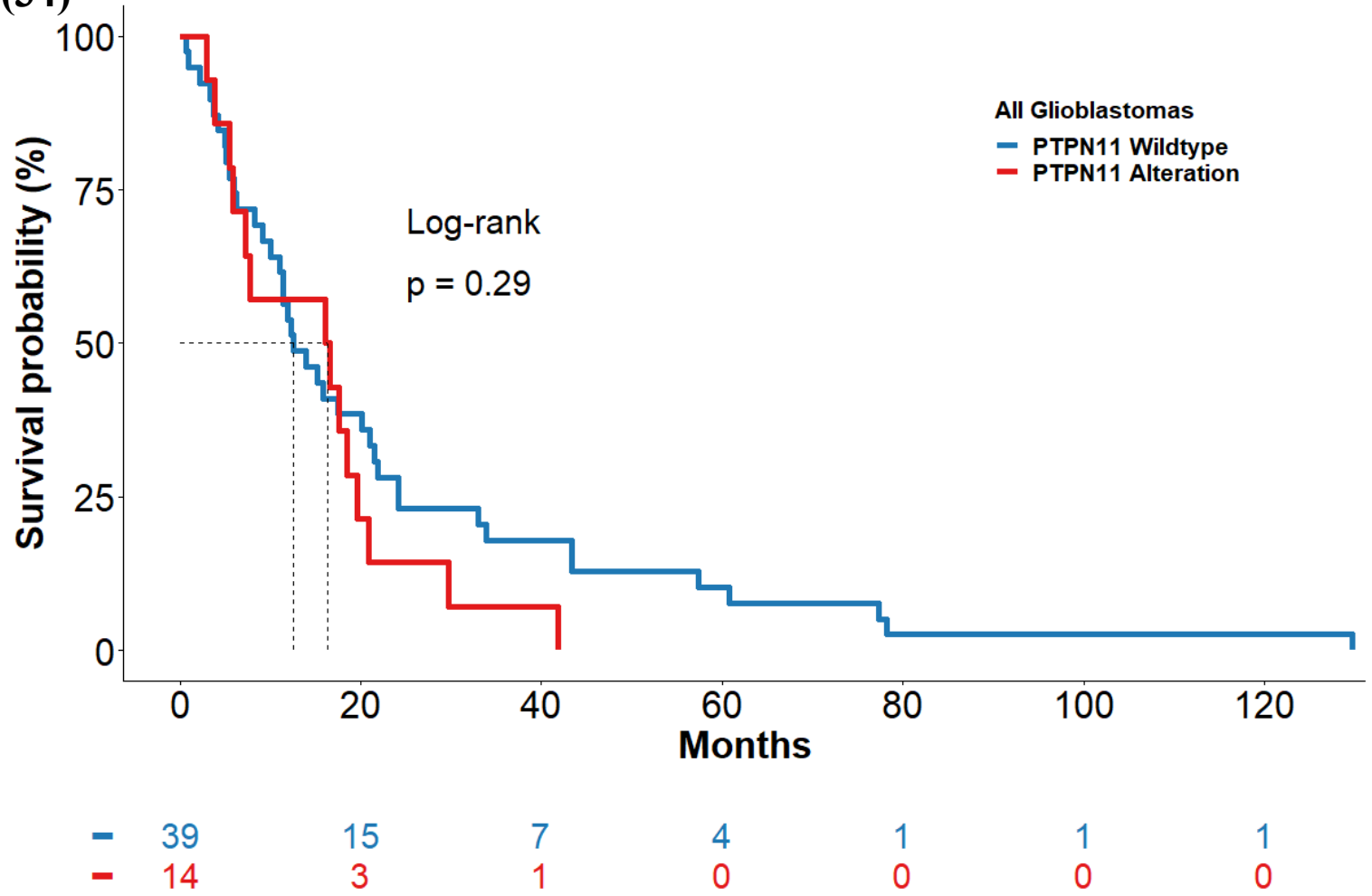
(32)


All Glioblastomas
PPM1D Wildtype
PPM1D Alteration
Log-rank
p = 0.41
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
37 14 6 3 1 1 1
16 4 2 1 0 0 0

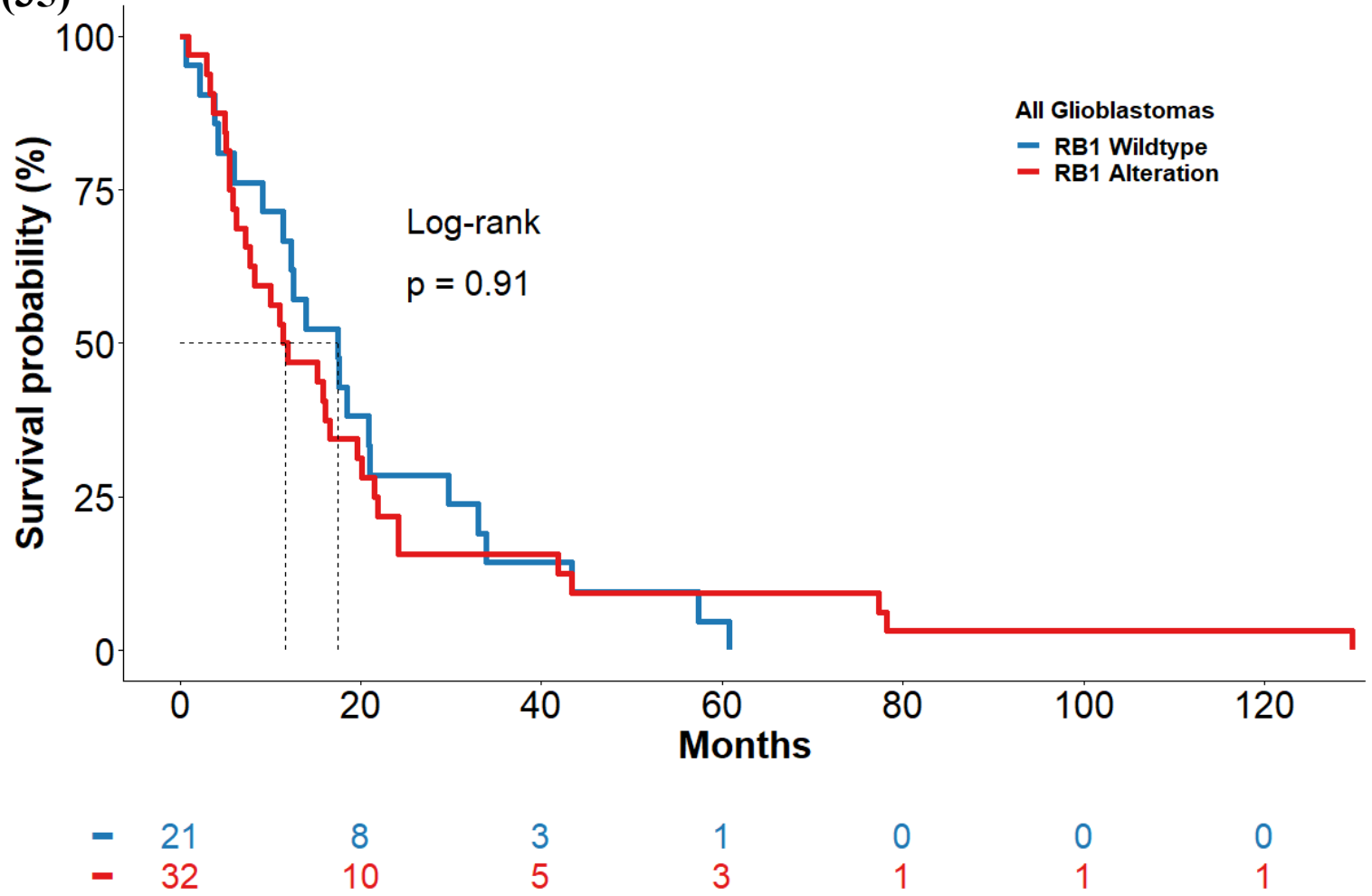
(33)


All Glioblastomas
PTEN Wildtype
PTEN Alteration
Log-rank
p = 0.25
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
14 7 5 2 0 0 0
39 11 3 2 1 1 1

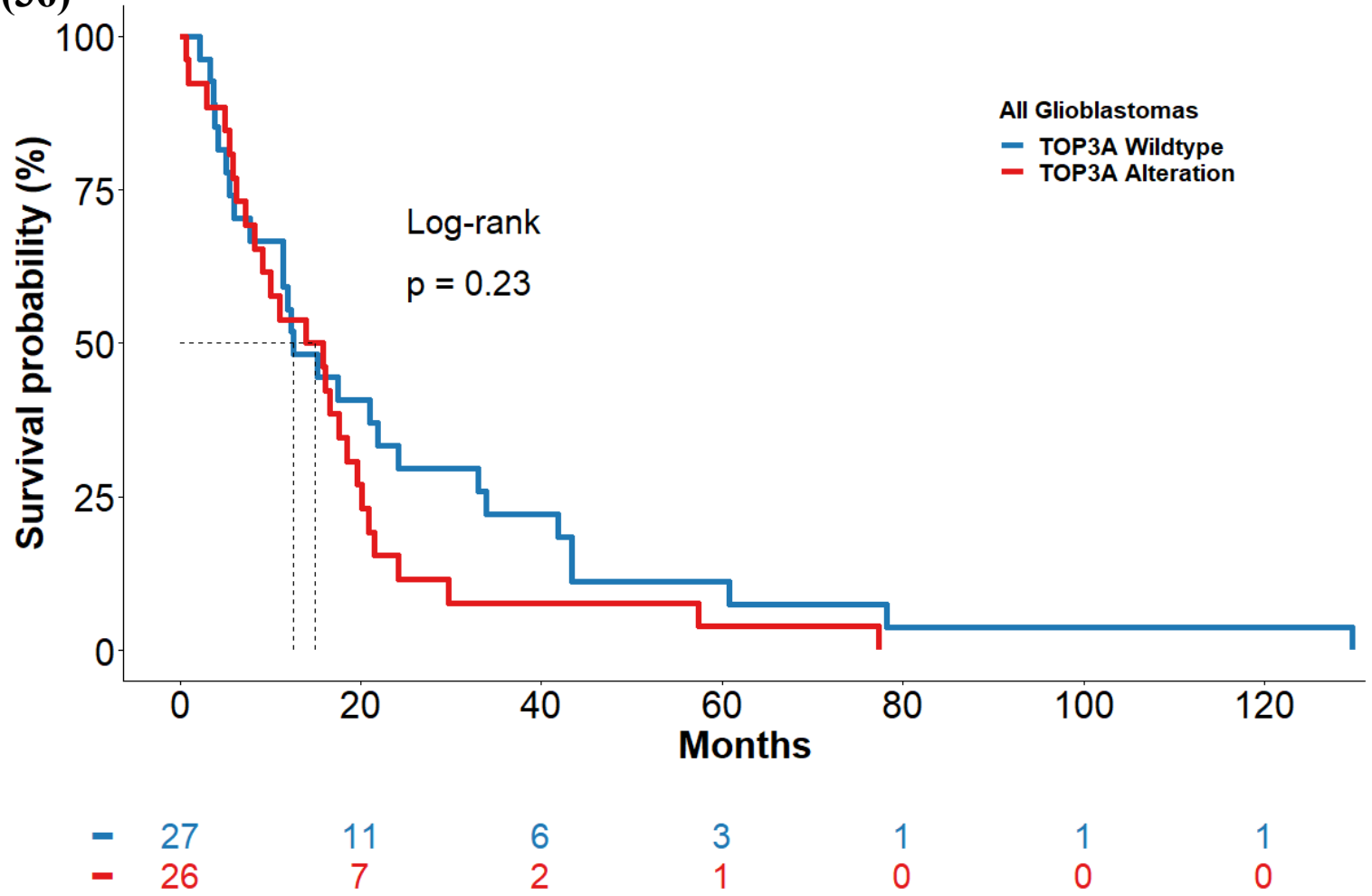
(34)


All Glioblastomas
PTPN11 Wildtype
PTPN11 Alteration
Log-rank
p = 0.29
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
39 15 7 4 1 1 1
14 3 1 0 0 0 0

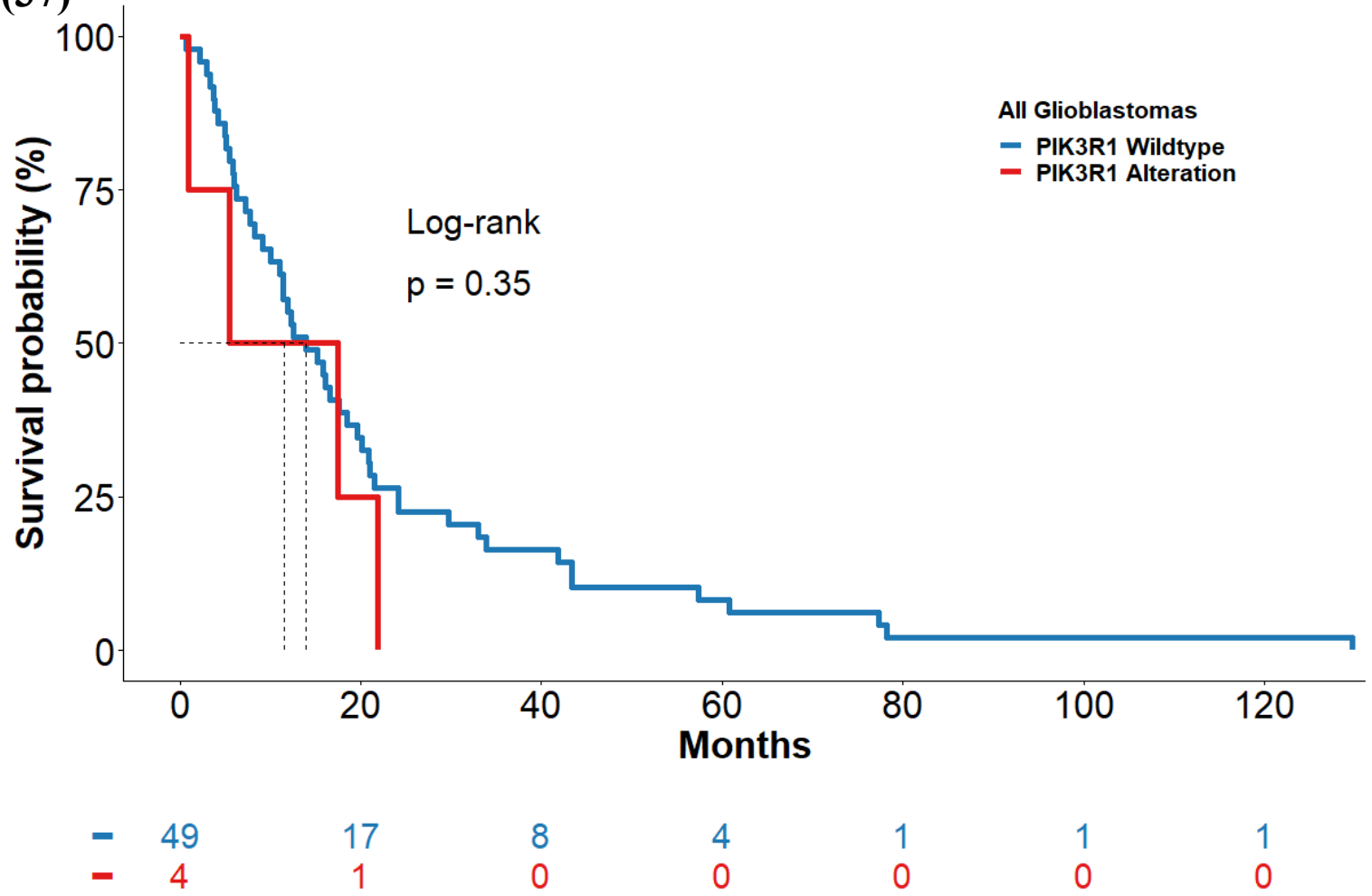
(35)


All Glioblastomas
RB1 Wildtype
RB1 Alteration
Log-rank
p = 0.91
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
21 8 3 1 0 0 0
32 10 5 3 1 1 1

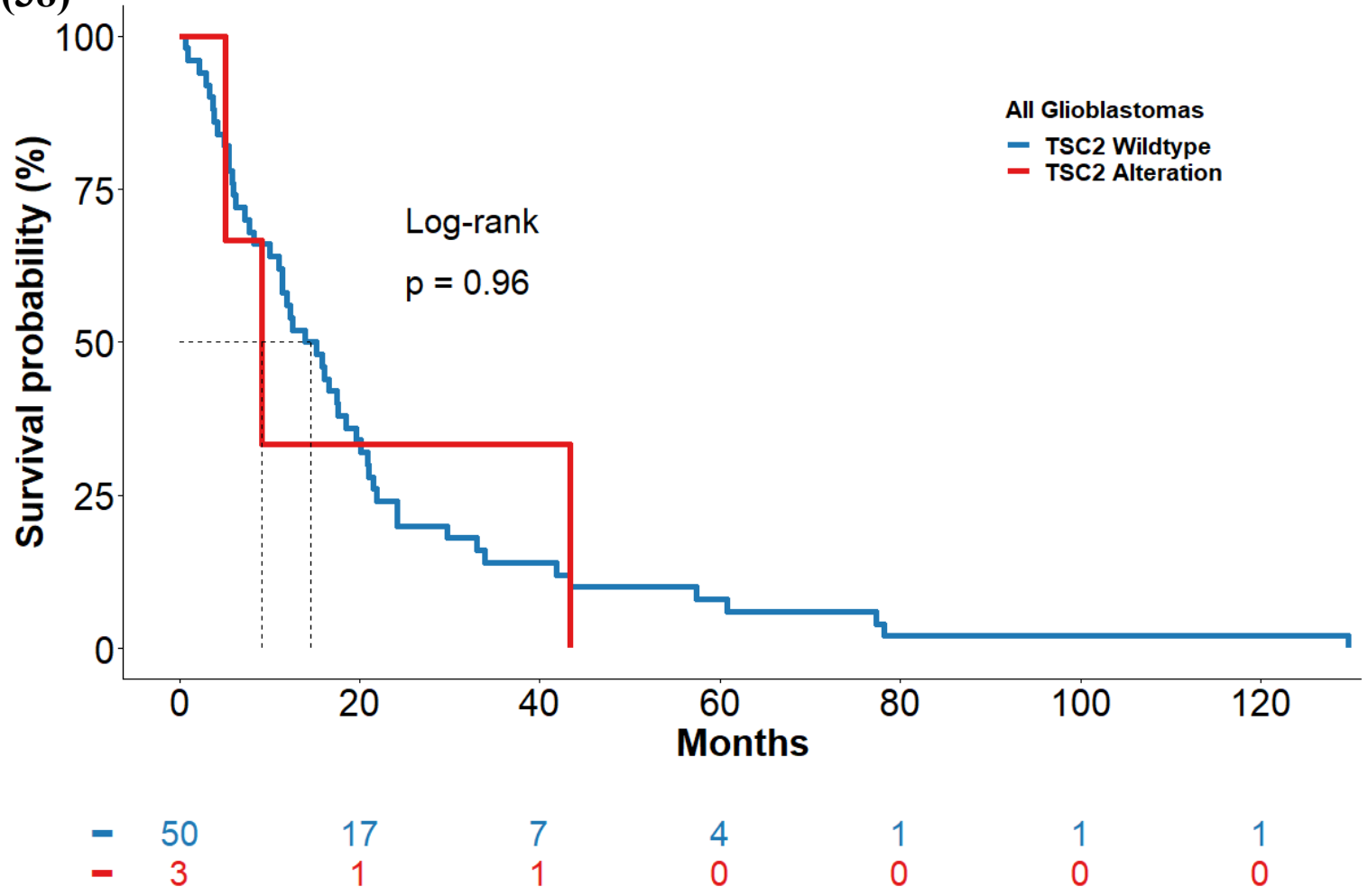
(36)


All Glioblastomas
TOP3A Wildtype
TOP3A Alteration
Log-rank
p = 0.23
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
27 11 6 3 1 1 1
26 7 2 1 0 0 0

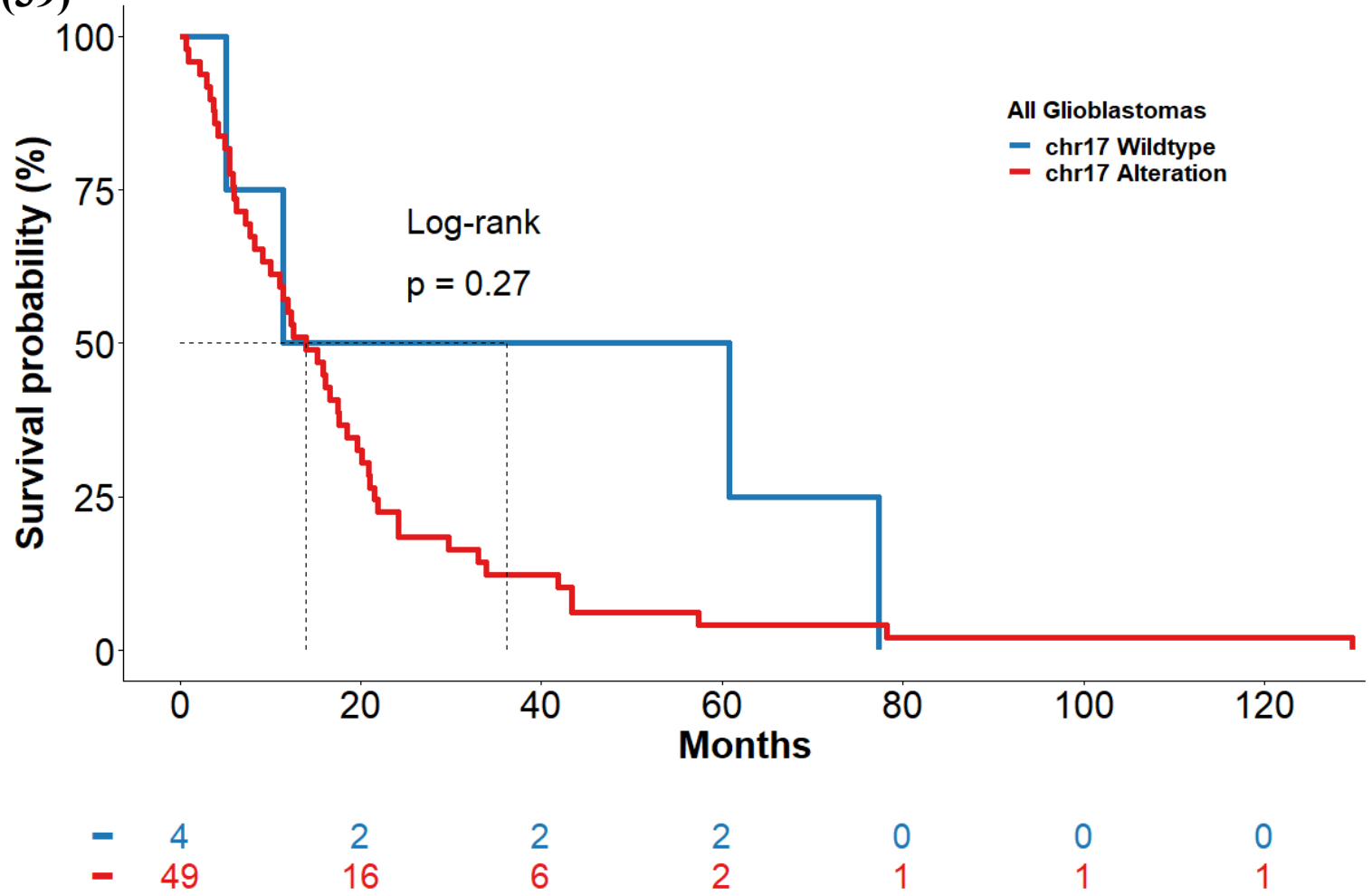
(37)


All Glioblastomas
PIK3R1 Wildtype
PIK3R1 Alteration
Survival probability (%)
100
75
50
25
0
Log-rank
p = 0.35
0
20
40
60
80
100
120
Months
49 17 8 4 1 1 1
4 1 0 0 0 0 0

(38)


All Glioblastomas
TSC2 Wildtype
TSC2 Alteration
Log-rank
p = 0.96
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
50 17 7 4 1 1 1
3 1 1 0 0 0 0

(39)


All Glioblastomas
chr17 Wildtype
chr17 Alteration
Log-rank
p = 0.27
Survival probability (%)
100
75
50
25
0
0
20
40
60
80
100
120
Months
4 2 2 2 0 0 0
49 16 6 2 1 1 1