

Online Table 1: Tumor laterality, international classification of intraocular retinoblastoma group, SOAIC agents, and adjunctive therapies in aggregate population

	International Classification of Intraocular Retinoblastoma	International Classification of Intraocular Retinoblastoma	International Classification of Intraocular Retinoblastoma	Single-Agent, Melphalan (Fraction of Total Eyes)	Single-Agent, Topotecan (Fraction of Total Eyes)	Triple-Agent Melphalan (Fraction of Total Eyes)
Aggregate study population	4 (0.19)	3 (0.14)	12 (0.57)	2 (0.09)	14 (0.67)	2 (0.09)
n = 21 eyes						5 (0.24)
n = 20 patients						
Eyes treated with IAV	+ (n = 15 eyes) - (n = 6 eyes)	4 (0.27) 0 (0)	8 (0.53) 4 (0.67)	2 (0.13) 0 (0)	10 (0.67) 4 (0.67)	0 (0) 0 (0)
Eyes treated with INA	+ (n = 14 eyes) - (n = 7 eyes)	4 (0.28) 0 (0)	8 (0.57) 4 (0.57)	11 (0.78) 2 (0.14)	2 (0.14) 0 (0)	1 (0.07) 4 (0.57)
Eyes treated with adjunctive ECBIO	+ (n = 14 eyes) - (n = 7 eyes)	3 (0.21) 1 (0.14)	9 (0.64) 3 (0.43)	3 (0.43) 2 (0.28)	3 (0.43) 10 (0.71)	0 (0) 1 (0.07)
Eye status according to DTR	Satisfactory (n = 15 eyes) Poor (n = 6 eyes)	4 (0.27) 0 (0)	1 (0.07) 3 (0.50)	2 (0.28) 1 (0.07)	12 (0.80) 2 (0.33)	2 (0.28) 2 (0.33)

Note: + indicates receiving; -, not receiving.

Online Table 2: Correlation of QTR with therapeutic adjuncts

	SOAIC Treatments with IAV Total n = 15 (Proportion of Total)	SOAIC Treatments without IAV Total n = 6 (Proportion of Total)	SOAIC Treatments with INA Total n = 14 (Proportion of Total)	SOAIC Treatments without INA Total n = 7 (Proportion of Total)	SOAIC Treatments with ECBO Total n = 14 (Proportion of Total)	SOAIC Treatments without ECBO Total n = 7 (Proportion of Total)
Aggregate study population, (n = 21)						
Average QTR [SD]	63.0 [SD, 19.6]	49.2 [SD, 28.7]	60.3 [SD, 22.8]	56.4 [SD, 24.1]	64.2 [SD, 19.9]	48.6 [SD, 25.9]
SOAIC with single-agent melphalan at any dose (n = 14)						
Average QTR [SD]	70.0 [SD, 14.1]	58.7 [SD, 30.6]	67.7 [SD, 19.3]	63.3 [SD, 24.7]	70.0 [SD, 19.4]	58.7 [SD, 20.1]
SOAIC with single-agent melphalan at doses of <5 mg (n = 12)						
Average QTR [SD]	70.0 [SD, 14]	32.5 [SD, 3.5]	63.9 [SD, 19.2]	63.3 [SD, 24.7]	67.8 [SD, 19.2]	51.7 [SD, 17.5]

Online Table 3: Correlation of DTR with therapeutic adjuncts

	SOAIC Treatments with IAV Total n = 15 (Proportion of Total)	SOAIC Treatments without IAV Total n = 6 (Proportion of Total)	SOAIC Treatments with INA Total n = 14 (Proportion of Total)	SOAIC Treatments without INA Total n = 7 (Proportion of Total)	SOAIC Treatments with ECBO Total n = 14 (Proportion of Total)	SOAIC Treatments without ECBO Total n = 7 (Proportion of Total)
Aggregate study population (n = 21)						
Poor DTR n = 6 (QTR <50%)	2 (0.13)	4 (0.67)	4 (0.29)	2 (0.29)	3 (0.21)	3 (0.43)
Satisfactory DTR n = 15 (QTR ≥ 50%)	13 (0.87)	2 (0.33)	10 (0.71)	5 (0.7)	11 (0.79)	4 (0.57)
SOAIC with single-agent melphalan at any dose (n = 14)						
Poor DTR n = 2 (QTR < 50%)	0 (0)	2 (0.50)	1 (0.09)	1 (0.33)	1 (0.10)	1 (0.25)
Satisfactory DTR n = 12 (QTR ≥ 50%)	10 (1.00)	2 (0.50)	10 (0.91)	2 (0.67)	9 (0.90)	3 (0.75)
SOAIC with single-agent melphalan at doses of <5 mg (n = 12)						
Poor DTR n = 2 (QTR < 50%)	0 (0)	2 (1.0)	1 (0.11)	1 (0.33)	1 (0.11)	1 (0.33)
Satisfactory DTR n = 10 (QTR ≥ 50%)	10 (1.0)	0 (0)	8 (0.89)	2 (0.67)	8 (0.89)	2 (0.67)

Online Table 4: Correlation of CIT and FT with therapeutic adjuncts

	SOAIC Treatments with IAV Total n = 15 (Proportion of Total)	SOAIC Treatments without IAV Total n = 6 (Proportion of Total)	SOAIC Treatments with INA Total n = 14 (Proportion of Total)	SOAIC Treatments without INA Total n = 7 (Proportion of Total)	SOAIC Treatments with ECBO Total n = 14 (Proportion of Total)	SOAIC Treatments without ECBO Total n = 7 (Proportion of Total)
Aggregate study population (n = 21)						
Average CIT [SD]	30.7 [SD, 11.6]	32.2 [SD, 6.0]	31.1 [SD, 12.0]	31.1 [SD, 5.8]	32.7 [SD, 10.5]	27.9 [SD, 9.4]
Average FT [SD]	32.0 [SD, 15.8]	23.2 [SD, 8.9]	34.6 [SD, 15.3]	19.1 [SD, 3.5]	33.4 [SD, 15.3]	21.7 [SD, 9.7]
SOAIC with single- agent melphalan at any dose (n = 14)						
Average CIT [SD]	28.8 [SD, 13.1]	33.7 [SD, 7.0]	30.5 [SD, 13.2]	29.0 [SD, 1.0]	32.9 [SD, 12.1]	23.5 [SD, 7.9]
Average FT [SD]	37.2 [SD, 16.9]	23.0 [SD, 10.9]	37.2 [SD, 16.3]	18.3 [SD, 1.5]	36.7 [SD, 17.0]	24.2 [SD, 12.3]

Online Table 5: Correlation of epoch with QTR, CIT, FT, and dichotomous therapeutic response

	Aggregate Study Population		SOAIC with Melphalan Group	
	Early-Epoch SOAIC	Late-Epoch SOAIC	Early-Epoch SOAIC	Late-Epoch SOAIC
	Treatments Total n = 11 (Proportion of Total)	Treatments Total n = 10 (Proportion of Total)	Treatments Total n = 7 (Proportion of Total)	Treatments Total n = 7 (Proportion of Total)
Poor response (QTR < 50%)	4 (0.36)	2 (0.20)	2 (0.29)	0 (0)
Satisfactory response (QTR ≥ 50%)	7 (0.64)	8 (0.80)	5 (0.71)	7 (1.00)
Average QTR [SD]	57.2 [SD, 25.5]	60.5 [SD, 20.5]	65.0 [SD, 26.4]	68.6 [SD, 11.0]
Average CIT [SD]	32.4 [SD, 6.3]	29.6 [SD, 13.4]	32.0 [SD, 6.3]	28.4 [SD, 15.7]
Average FT [SD]	25.7 [SD, 8.2]	33.6 [SD, 19.0]	27.6 [9.7]	38.7 [SD, 20.4]

Online Table 6: Correlation of CIT and FT intervals with QTR, epoch, and dichotomous therapeutic response in aggregate population

	Satisfactory Response QTR ≥ 50% Total n = 15 (Proportion of Total)	Poor Response QTR < 50% Total n = 6 (Proportion of Total)	Early-Epoch Total n = 11 (Proportion of Total)	Late-Epoch Total n = 10 (Proportion of Total)	Average QTR [SD]
Average CIT (min) [SD]	30.2 [SD, 11.3]	31.7 [SD, 7.0]	32.4 [SD, 6.3]	29.6 [SD, 13.4]	NA
Brief infusion time, CIT < 20 min (n = 2)	2 (1.00)	0 (0)	0 (0)	2 (1.00)	67.5 [SD, 3.5]
Intermediate infusion time CIT = 20–38 min (n = 15)	11 (0.73)	4 (0.27)	9 (0.60)	6 (0.40)	59.0 [SD, 24.5]
Prolonged infusion time, CIT, ≥ 9 min (n = 5)	3 (0.60)	2 (0.40)	3 (0.60)	2 (0.40)	44.8 [SD, 9.0]
Average FT (min)	31.9 [SD, 16.1]	23.3 [SD, 7.7]	25.7 [SD, 8.2]	33.6 [SD, 19.0]	NA
Brief fluoroscopy time, <20 min (n = 5)	2 (0.40)	3 (0.60)	3 (0.60)	2 (0.40)	45.0 [SD, 30.6]
Intermediate fluoroscopy time, 20–35 min (n = 11)	8 (0.73)	3 (0.27)	7 (0.64)	4 (0.36)	59.5 [SD, 19.0]
Prolonged fluoroscopy time, >35 min (n = 5)	5 (1.00)	0 (0)	1 (0.20)	4 (0.80)	72.0 [SD, 16.8]

Note:—NA indicates not applicable.

Online Table 7: Procedure-related adverse events

Adverse Event	Patient Age	IAV Status	INA Status	ECBO Status	Chemotherapy Agents	FT (Min)	CIT (Min)
Ocular adverse events							
Severe diffuse ocular edema requiring oral steroid therapy	12 mo	+	Ø	+	Melphalan	41	31
Small retinal hemorrhage involving internal limiting membrane of retina	10 mo	+	+	+	Melphalan	36	14
Small subretinal hemorrhage	2 mo	+	+	+	Triple-agent chemotherapy	41	29
Eyelid edema requiring oral steroid therapy	48 mo	Ø	Ø	+	Triple-agent chemotherapy	27	13
Neurovascular adverse events							
Focal catheterization-related spasm of ophthalmic artery resulting in transient ophthalmic artery flow reversal, resolved with IAV	7 mo	+	+	+	Melphalan	76	60
Nonflow restrictive spasm in cortical branches of MCA on initial angiography, resolved spontaneously during the procedure; no clinical or brain MR imaging findings on follow-up	8 mo	+	+	+	Melphalan	36	36
Cardiovascular adverse events							
Transient procedure-related hypotension related to verapamil administration resolved with intravenous albumin boluses and calcium gluconate	7 mo	+	+	+	Melphalan	76	60
Perioperative hypotension and anemia requiring intravenous hydration and packed red blood cell transfusion	8 mo	+	+	+	Melphalan	36	36
Respiratory adverse events							
Postextubation laryngospasm requiring reintubation and overnight hospital admission	9 mo	+	+	+	Melphalan	32	28
Intraoperative bronchospasm	10 mo	+	+	Ø	Melphalan	36	12
Intraoperative bronchospasm	10 mo	+	+	+	Melphalan	36	14
Access site adverse events							
Self-limited groin hematoma not requiring treatment	36 mo	+	+	+	Melphalan	25	26
Transient thrombosis of left external iliac artery treated with lovenox, without sequelae	10 mo	+	+	+	Triple-agent chemotherapy	41	25

If a therapeutic adjunct (IAV, INA, ECBO) was employed during the index SOAIC corresponding to the listed complication a (+) is indicated in the status column of the corresponding therapeutic adjunct.

If a therapeutic adjunct (IAV, INA, ECBO) was not employed during the index SOAIC corresponding to the listed complication a (Ø) is indicated under the status column of the corresponding therapeutic adjunct.