A Phase 2 Trial of Belzupacap Sarotalocan (AU-011): An Investigational Targeted Therapy for Choroidal Melanoma via Suprachoroidal Administration

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### On Behalf of the Belzupacap Sarotalocan Investigator Group

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# **Financial Disclosures**

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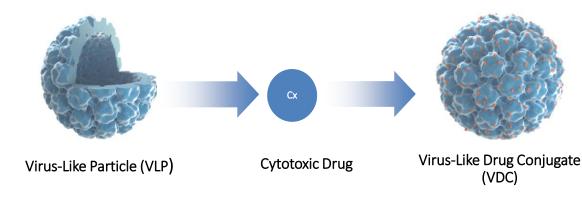
## Bel-sar Ocular Oncology Investigator Group

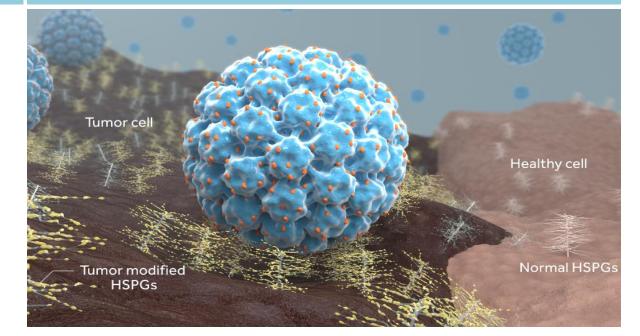


## Targeted Oncology Platform: Virus-Like Drug Conjugates (VDCs)

Virus-Like Particles Conjugated to a Cytotoxic Payload to form the VDC

### VDCs Selectively Bind Tumor Associated HSPGs<sup>\*</sup>



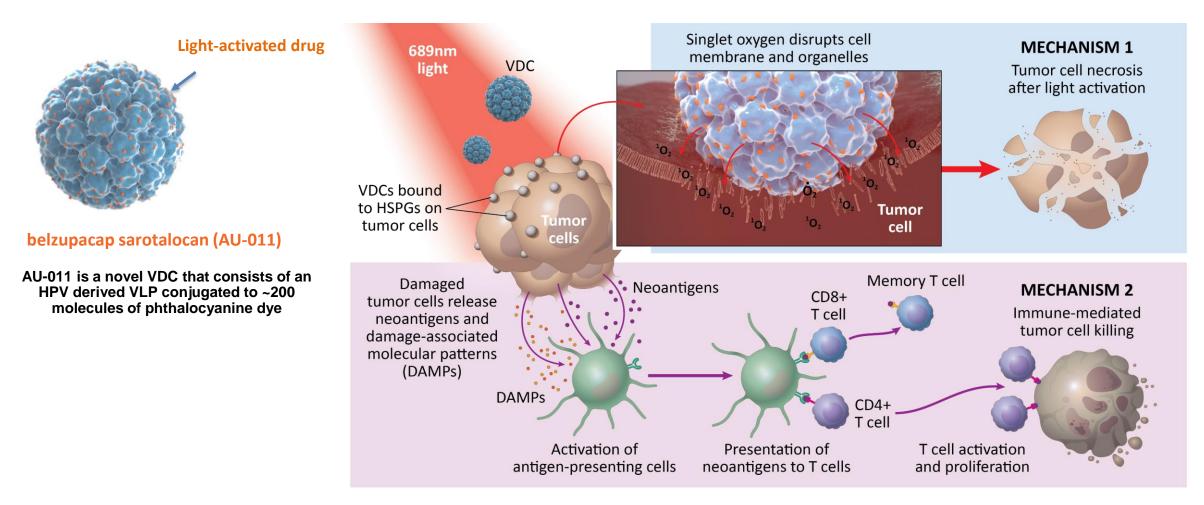


### Technology Platform Designed to Target Broad Range of Solid Tumors Based on Virus-Like Particles with Multiple Options for Cytotoxic Payloads

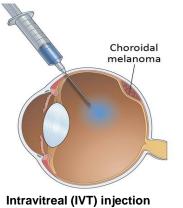
Kines et al; International Journal of Cancer, 138;901–911, February 2016; Kines et al; Molecular Cancer Therapeutics, 17(2) February 2018; Kines et al; Cancer Immunology Research, May 2021

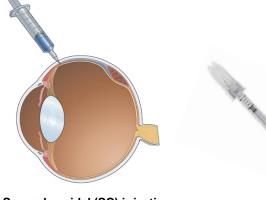
\* HSPGs: Heparan Sulphate Proteoglycans

## Belzupacap sarotalocan (AU-011) Is an Investigational VDC Designed with a Novel Dual Mechanism of Action



## Suprachoroidal Administration Optimizes Delivery to the **Posterior Segment**





Suprachoroidal (SC) injection

#### Optimize therapeutic index

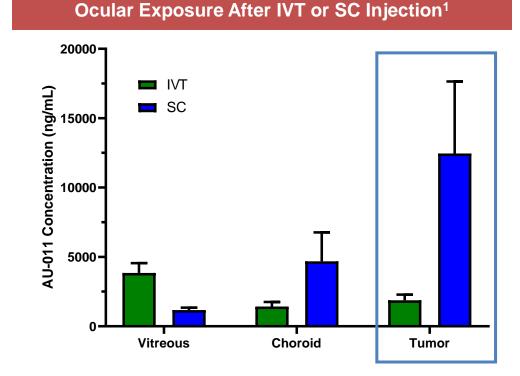
- 5x higher tumor exposure with SC versus IVT observed in preclinical model
- Lower levels in the vitreous translates into lower risk of Intraocular Inflammation and vitreous floaters

#### **Optimize treatment parameters**

Shorter time to laser activation

#### May increase potential patient population 0

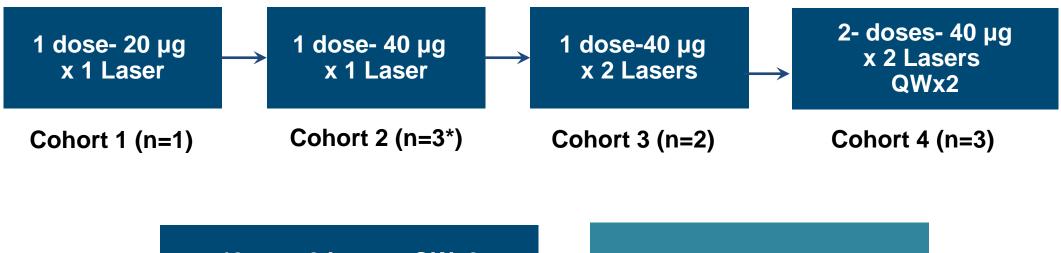
- Medium choroidal tumors
- Choroidal Metastases



PK studies in rabbit tumor model demonstrate higher tumor bioavailability with SC administration

## Phase 2 Trial of Bel-sar via Suprachoroidal Administration Dose Escalation Study Design

**Patient Population:** Indeterminate lesions and small choroidal melanoma (IL/CM) **Objective:** Determine the optimal dose and therapeutic regimen with suprachoroidal administration



40 μg x 2 Lasers-QWx3 2 cycles (6 doses) n=1 or 3 cycles (9 doses) n=2

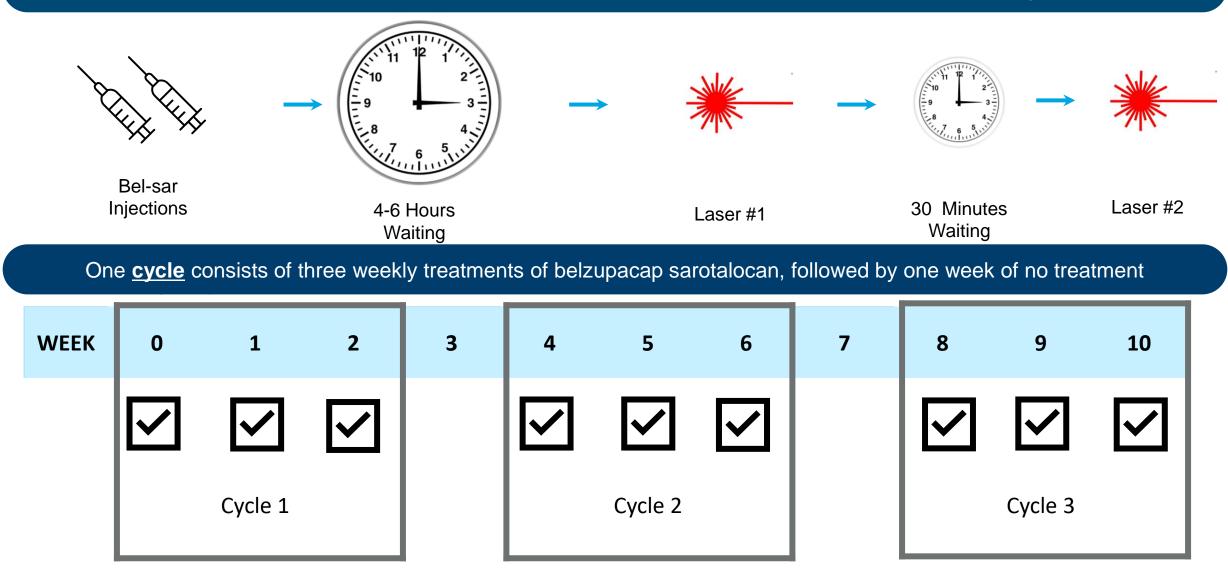
Cohort 5 (n=3)

80 µg x 2 Lasers-QWx3 3 cycles (9 doses)

Cohort 6 (n=10)

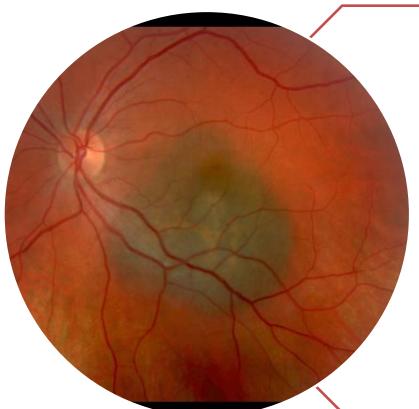
## Bel-sar Therapeutic Regimen is Completed in 3 Treatment Cycles

One treatment consists of two suprachoroidal injections of belzupacap sarotalocan, followed by two light activations



## Patient Population Representative of Early-Stage Disease

Indeterminate Lesions and Small Choroidal Melanoma



## Small Tumors with Active Growth

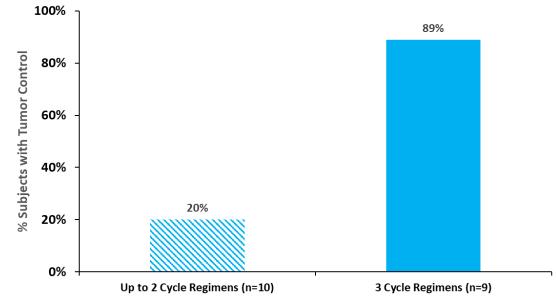
- Tumor thickness ≥0.5 mm and ≤2.5 mm
- Largest Basal Diameter (LBD) ≤10 mm
- Active tumor growth within 2 years of screening

Eligibility criteria for Cohort 6 and planned Phase 3

Enrichment Strategy to Enroll Subjects with Actively Growing Tumors Provides Important Insight to Potentially Demonstrate a Disease Modifying Effect as Proof of Concept

### Interim Tumor Control Rates Demonstrated a Dose Response

Dose Response: Lower Regimens vs. 3 Cycle Regimens



Tumor Progression: change from baseline in thickness ≥0.5mm; or in LBD ≥1.5mm confirmed by at least one repeat assessment

10 January 2023 cutoff, interim data

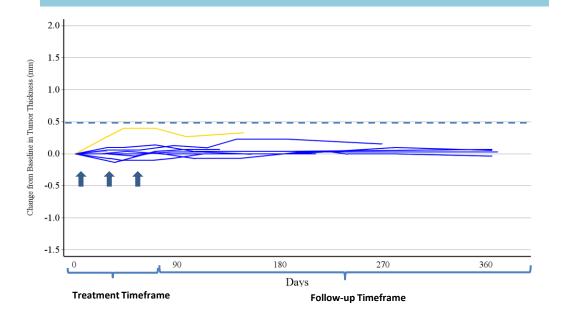
#### Average 8-10 Months of Follow Up

Populations	Total Patients (n)	Tumor Control Rate	Average Follow-up (months)
All Doses/Regimens			
All Treated Patients	20	55% (11/20)	9
Lower Doses/Regimens			
Up to 2 cycles (20µg-40µg)	10	20% (2/10)	10
Highest Doses/Regimens*+			
3 Cycles (n=9) 40µg (n=2)/80µg (n=7)	9	89% (8/9)	8

\*One subject in C6 who discontinued after 1 cycle due to unrelated SAEs is not included \*Assigned regimen of 3 cycles (Cohort 6) and Cohort 5 subjects who received 3 cycles, each cycle comprised of 3 once/week treatments of 40µg x 2 Laser or 80µg x 2 Laser

### Interim Analysis Demonstrated Tumor Control Rate of 89%-100%

#### Active Growth and 3 Cycle Regimens (n=9)



#### Change from Baseline in Tumor Thickness Over 12 Months

Progression Definition based on Tumor Thickness (Increase ≥0.5mm) Subject 015-2029 had circumpapillary tumor – similar subjects will be excluded from Phase 3 trial

Tumor Progression: change from baseline in thickness  $\geq$ 0.5mm; or in LBD  $\geq$ 1.5mm confirmed by at least one repeat assessment

Interim data cutoff 10 January 2023; post-SOC data not included. Arrows indicate time of each cycle

### Average 8-9 Months of Follow Up

Populations	Total Patients (n)	Tumor Control Rate	Average Follow-up (months)
Highest Doses/Regimens			
3 Cycles (n=9) 40μg (n=2)/80μg (n=7)	9	89% (8/9)	8
Highest Doses/Regimens - Planne	d Phase 3 <sup>^</sup>		
3 Cycles (n=8) 40µg (n=2)/80µg (n=6)	8	100% (8/8)	9

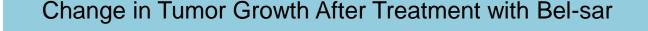
One subject in C6 who discontinued after 1 cycle due to unrelated SAEs is not included Assigned regimen of 3 cycles (Cohort 6) and Cohort 5 subjects who received 3 cycles, each cycle comprised of 3 once/week treatments of 40µg x 2 Laser or 80µg x 2 Laser

<sup>^</sup>One subject in C6 with circumpapillary tumor not included (similar subjects not planned in Phase 3 trial)

### Interim Analysis of Tumor Growth Rate with 3 Cycle Regimens

Change in Tumor Growth (mm/yr) Active Growth and 3 Cycle Regimens (n=9)

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Growth Rate Growth Rate

Historical

n

AU-011

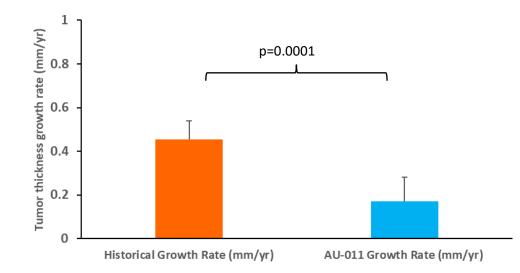
Growth Rate

Reduction

Average

Follow up

p-value



10 January 2023 cutoff, interim data

		(mm/yr)	(mm/yr)	(mm/yr)		(months)		
Highest Doses/Regi	mens*	k+						
3 Cycles (40µg-80µg) 40µg (n=2)/80µg (n=7)	9	0.454	0.169	-0.285	0.0001	8		
Highest Doses/Regimens and Similar to Planned Phase 3*+^								
3 Cycles (40µg-80µg) 40µg (n=2)/80µg (n=6)	8	0.382	0.093	-0.289	<0.0001	9		
Tumor thickness growth rates/ slopes estimated using MMRM (random intercent and slope model for Hx								

Tumor thickness growth rates/ slopes estimated using MMRM (random intercept and slope model for Hx and Study periods)

\*One subject in C6 who discontinued after 1 cycle due to unrelated SAEs is not included

<sup>+</sup>Assigned regimen of 3 cycles (Cohort 6) and Cohort 5 subjects who received 3 cycles, each cycle comprised of 3 once/week treatments of 40μg x 2 Laser or 80μg x 2 Laser

^One subject in C6 with circumpapillary tumor not included (similar subjects not planned in Phase 3 trial)

#### Interim Data Shows Statistically Significant Growth Rate Reduction in 3 Cycle Regimen Subjects

### Interim Analysis Demonstrated High Rate of Visual Acuity Preservation

Vision Preservation Rates 8-9 months follow up							
Populations	Total Patients (n)	Vision Failures (n)	Vision Preservation Rate	Mean Change from Baseline at Last Visit (letters)	Average Follow-up (months)		
All Dose Cohorts							
All Treated Patients	20	2	90%	-3.7	9		
Lower Doses/Regimens							
Up to 2 cycles (20µg-40µg)	10	1	90%	-3.2	10		
Highest Doses/Regimens*+							
3 Cycles (40µg-80µg) 40µg (n=2)/80µg (n=7)	9	1	89%	-4.8	8		
Highest Doses/Regimens and Similar to Planned Phase 3 <sup>*+</sup>							
3 Cycles (40µg-80µg)^ 40µg (n=2)/80µg (n=6)	8	1	88%	-5.3	9		

\*One subject in C6 who discontinued after 1 cycle due to unrelated SAEs is not included

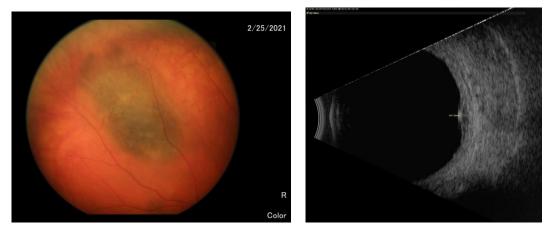
\*Assigned regimen of 3 cycles (Cohort 6) and Cohort 5 subjects who received 3 cycles, each cycle comprised of 3 once/week treatments of 40µg x 2 Laser or 80µg x 2 Laser

Vision Failure: Confirmed loss ≥15 letters at ≥Week 39; post-SOC data not included

^7 out of 8 subjects in this subgroup were high-risk for vision loss (tumor edge ≤ 3 mm from the foveola or optic disc)

10 January 2023 cutoff, interim data

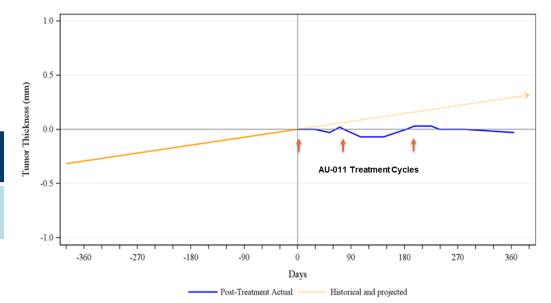
### Phase 2 SC Trial: Cohort 5 Subject Tumor Control & Vision at 1 year



**Photograph and ultrasound at baseline** TT: 1.50 mm, LBD: 8.92 mm (IRC reads)

# 2/24/2022 R Color

Photograph and ultrasound at 12 months TT: 1.47 mm, LBD: 8.55 mm (IRC reads)



Cohort 5 Subject with Documented Tumor Growth Tumor location: Superotemporal

	Baseline	Week 4	Week 8	Week 12	Week 26	Week 39	Week 52
BCVA (letter score)	91	92	92	89	89	90	89

BCVA: best corrected visual acuity; IRC: independent reading center; LBD: largest basal diameter; TT: tumor thickness

Historical and projected growth based on MMRM

## Ongoing Safety Data Continue to Be Favorable No Related SAEs/DLTs Observed to Date

All Treated Subjects (n=20) Drug/Laser Related Adverse Events	Grade I	Grade II	Grade III	Total
Anisocoria	5%	0	0	5%
Anterior chamber cell	5%	0	0	5%
Anterior chamber inflammation	20%	0	0	20%
Conjunctival edema	5%	0	0	5%
Conjunctival hemorrhage	5%	0	0	5%
Conjunctival hyperemia	15%	0	0	15%
Cystoid macular edema	5%	0	0	5%
Eye pain	10%	5%	0	15%
Eyelid edema	5%	0	0	5%
Ocular discomfort	5%	0	0	5%
Photophobia	5%	0	0	5%
Punctate keratitis	10%	0	0	10%
Pupillary reflex impaired	5%	0	0	5%
Retinal pigment epitheliopathy	5%	0	0	5%
Salivary gland enlargement	0	5%	0	5%

10 January 2023 cutoff, interim data

Table presents percentage of subjects with AEs related to bel-sar or laser by severity and overall; subjects with more than 1 AE are counted in the highest severity group

- Majority of AEs were transient and resolved without clinical sequelae
- No DLTs<sup>†</sup>, no significant vitritis to date through 3 cycles with 80 µg of AU-011
- 3 moderate severity events related to injection procedure
  - Scleritis, conjunctival edema and eye irritation
  - All other injection related events were mild
- 6 non-treatment related SAEs reported in 3 subjects^
- No pigmentary changes similar to previous trial observed at edge of tumor treatment

 $^{\dagger}\text{No}$  dose limiting toxicities or treatment-related SAEs

^ 6 SAEs (in 3 subjects) unrelated to AU-011 treatment (retinal detachment, retinal vein occlusion, brain abscess, deep vein thrombosis, sarcoma, seizure)

Interim Analysis of Phase 2 Trial with SC Administration Demonstrated Support for Potential First-Line Treatment of Early-Stage Disease (IL/CM)

Safety Data **Visual Acuity Tumor Control Tumor Thickness Growth Rate** Low to No Intraocular Inflammation

**Route of Administration** 

Mild to moderate treatment-related AEs overall and no related SAEs/DLTs observed to date

Visual acuity preservation rate of 88-90% even in subjects with tumors close to the fovea or optic disc

Early outcomes have shown high tumor control rate (~89-100 %) with approximately 9 months average follow up in subjects treated with the therapeutic regimen

Statistically significant reduction in early analysis of tumor growth rates (p=0.0001)

Minimal anterior uveitis and no vitritis observed to date No pigmentary changes

Initial safety and efficacy data in this ongoing Ph2 trial support SC administration as a potential route