UBX0101
Phase 1 Results

June 18, 2019

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This presentation and the accompanying oral commentary contain forward-looking statements, including: statements related to our understanding of cellular senescence and the role cellular senescence plays in diseases of aging; our expectations regarding the potential benefits, activity, effectiveness and safety of UBX101, and our expectations with regard to the results of our clinical studies. These statements involve substantial known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. The forward-looking statements in this presentation represent our views as of the date of this presentation. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this presentation.

For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of the Company in general, see UNITY's most recently filed Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed with the Securities and Exchange Commission on May 8, 2019, as well as other documents that may be filed by UNITY from time to time with the Securities and Exchange Commission.

This presentation concerns drug candidates that are under clinical investigation and which have not yet been approved for marketing by the U.S. Food and Drug Administration. They are currently limited by Federal law to investigational use, and no representation is made as to their safety or effectiveness for the purposes for which they are being investigated.

A NEW HEALTH PARADIGM

UNITY is committed to reshaping human healthspan

BREAKTHROUGH SCIENCE	• Broad approach to healthspan with initial efforts focused on cellular senescence • Cutting edge science published in *Science* and *Nature* • Tractable molecular targets with a clear tie to disease phenotypes • IP portfolio covering senolytic approach, key pathways, target indications and molecules
COMPELLING OPPORTUNITY	• Many disease phenotypes with large unmet need • **Phase 1 study of UBX0101 in patients with osteoarthritis data reported today** • Ophthalmology IND expected in early 2020 enabling multiple indications
EXPERIENCED TEAM	• Seasoned executive team with broad biotech experience • Strong track record of delivering for patients and investors
STRONG FINANCIAL POSITION	• Cash equivalents and investments balance of $150.2 million as of March 31, 2019

UNITY PIPELINE

Broad therapeutic potential, addressing multiple mechanisms of aging

*Following IPF Outcome

OPPORTUNITY FOR OA DISEASE MODIFICATION

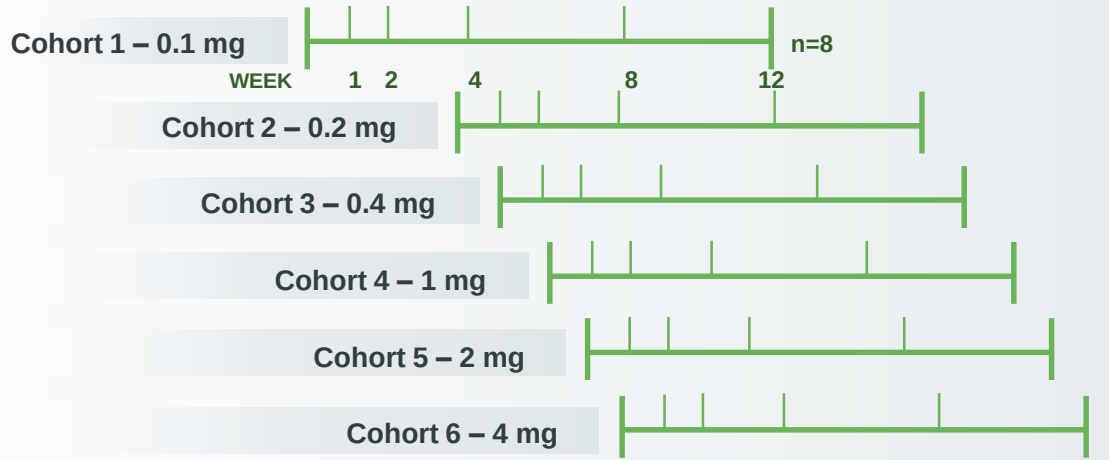
The promise of a senolytic therapy

MECHANISM	Novel mechanism to address root cause of OA, ***remove source of multiple SASP factors driving disease***
Tx IMPACT	Potential to be ***1st disease-modifying therapy for OA***; slow, halt or reverse disease, decrease pain and improve function
Tx FREQUENCY	Senolytic treatment likely requires ***infrequent, intermittent dosing***

UBX0101 PHASE 1 PROGRAM

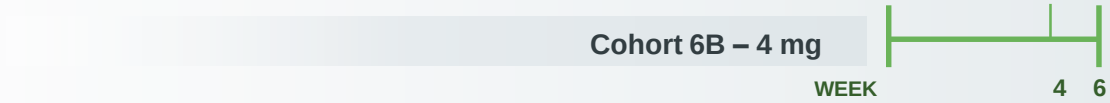
PART A:
Single Ascending Dose

- Patients with OA, KL 1-4 + active synovial inflammation by MRI
- N=48
- Active to Placebo: 3:1



PART B:
SF Expansion

- Patients with OA, KL 1-4
- N=30
- Active to Placebo: 2:1



Primary Measure (Part A & B): Safety

Secondary Measures (Part A): Plasma PK, Semi-quantitative assessment of synovitis by MRI,11-Point NRS pain assessment, WOMAC-A (pain), WOMAC-C (function), & total WOMAC, Synovial fluid SASP/OA biomarkers

Secondary Measures (Part B): Synovial fluid SASP/OA biomarkers, Plasma PK, WOMAC-A (pain)

PATIENT DEMOGRAPHICS

	Part A		Part B	
	Total Subjects (n=48)	Cohorts Balanced	Total Subjects (n=30)	Cohorts Balanced
Age (yrs)	62.4	Yes	61.2	Yes
Gender (M:F)	16:32	No	15:15	Yes
Race (%) (Asian/African American/Pacific Islander/White/American Indian)	0 / 6.3 / 0 / 89.6 / 4.2	Yes	0 /16.7 / 0 / 82.3	Yes
Ethnicity (%) (Hispanic/Non-Hispanic/Unknown)	33.3 / 64.6 / 2.1	No	40 / 60 / 0	Yes
Weight (kg)	82.20	Yes	84.50	Yes
Height (cm)	165.0	Yes	167.0	Yes
BMI (kg/m^2)	30.25	Yes	29.10	Yes

BASELINE PATIENT CHARACTERISTICS

Baseline Characteristic	Part A (UBX-0101 Intra- Articular Dose in mg) Mean (SD)							Part B Mean (SD)	
Dose Group (n)	**Placebo (n=14)**	**0.1 (n=6)**	**0.2 (n=5)**	**0.4 (n=5)**	**1.0 (n=6)**	**2.0 (n=6)**	**4.0 (n=6)**	**Placebo (n=10)**	**4.0 (n=20)**
K-L Score	2.58 (0.90)	2.83 (0.41)	3.00 (1.22)	3.00 (1.22)	2.67 (0.52)	2.50 (0.84)	3.17 (0.41)	2.50 (0.85)	2.47 (1.12)
11-pt Synovitis Score	13.36 (5.14)	10.33 (5.79)	16.20 (4.21)	8.25 (5.19)	12.67 (4.80)	12.00 (5.59)	11.17 (5.38)	Not measured in Part B	
Yrs Dx with OA	6.84 (4.04)	15.4 (15.3)	11.3 (4.39)	10.3 (6.57)	13.4 (10.1)	11.6 (8.39)	6.84 (4.05)	10.1 (8.73)	8.64 (6.36)
BL WOMAC total	47.14 (12.96)	54.17 (7.41)	37.60 (11.55)	58.80 (10.08)	50.67 (14.07)	41.67 (11.45)	46.67 (6.44)	52.40 (12.57)	50.45 (16.37)
BL WOMAC A Pain	9.36 (2.21)	11.17 (1.94)	9.00 (0.71)	11.80 (1.48)	9.67 (2.94)	8.50 (3.15)	9.83 (1.60)	11.30 (1.89)	11.10 (3.40)
BL WOMAC B Stiffness	4.93 (1.27)	4.83 (0.98)	4.80 (0.84)	5.00 (1.41)	4.50 (1.52)	4.00 (0.89)	3.67 (0.82)	4.40 (1.35)	4.40 (1.47)
BL WOMAC C Function	32.86 (10.80)	38.17 (5.08)	23.80 (10.94)	42.00 (8.28)	36.50 (10.62)	29.17 (9.43)	33.17 (5.27)	36.70 (10.24)	34.95 (12.70)
BL Weekly Average NRS	6.47 (1.11)	5.90 (1.40)	6.30 (0.53)	6.76 (1.10)	6.49 (1.55)	6.15 (1.18)	6.29 (1.42)	Not measured in Part B	

SAFETY AND TOLERABILITY

- UBX0101 was well tolerated up to the maximum administered dose of 4mg
- No serious adverse events
- No AEs led to discontinuation from study
- No dose-dependence in AEs or in clinical laboratory findings in Part A
- The majority of AEs were mild (66% in Part A and 75% in Part B)

Treatment-emergent AE occurring in ≥ 2 patients in Parts A or B

Preferred Term	Part A, 0.1- 4mg (N= 34) n (%)	Placebo (N= 14) n (%)	Part B (4 mg) (N= 20) n (%)	Placebo (N= 10) n (%)
Nasopharyngitis	2 (5.9)	1 (7.1)	0	0
Procedural pain	2 (5.9)	1 (7.1)	2 (10.0)	0
Arthralgia	3 (8.8)	1 (7.1)	0	1 (10.0)
Headache	4 (11.8)	1 (7.1)	0	0

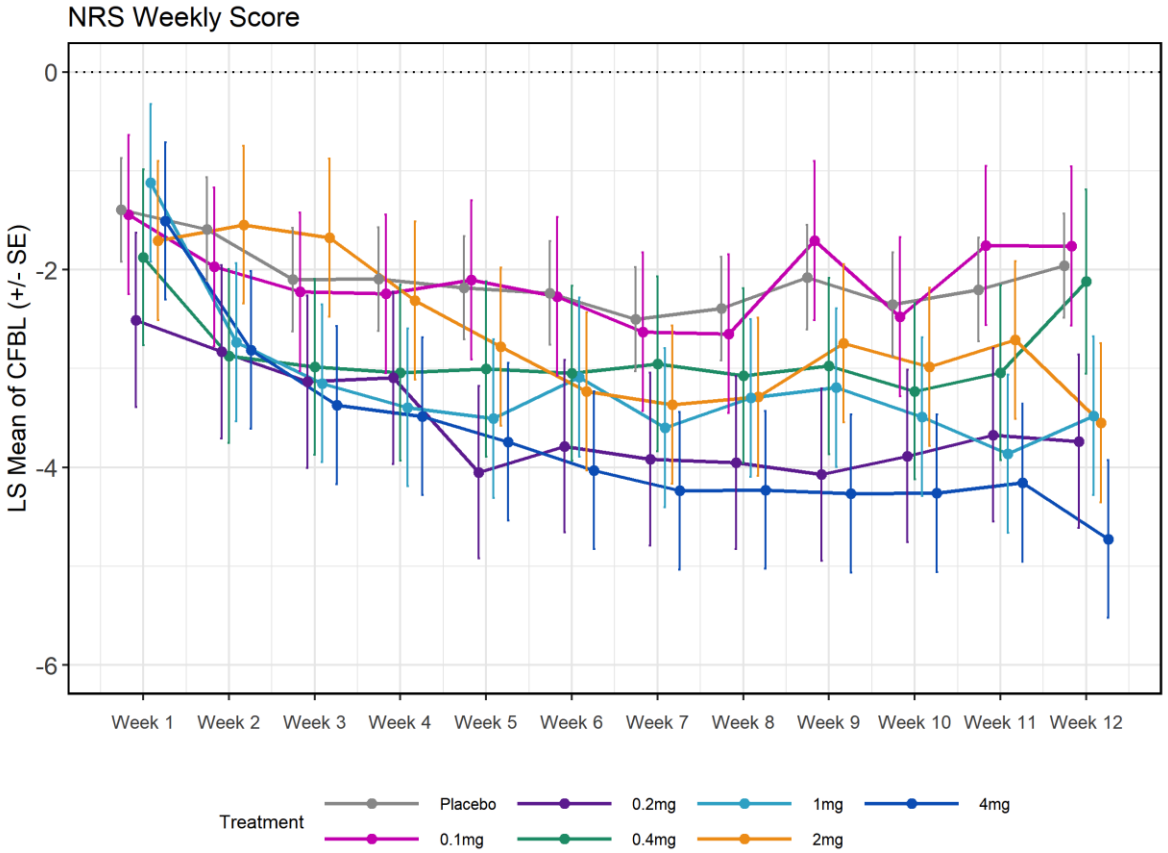
PART A - PAIN – NUMERICAL RATING SCALE

All Dose Cohorts

NRS Weekly Mean Scores

Minimal Clinically Important Dose

- Change from baseline of 2 points



PART A - PAIN – NUMERICAL RATING SCALE

Grouped Dose Cohorts

Low Dose - (0.1, 0.2, 0.4 mg)

High Dose - (1.0, 2.0, 4.0 mg)

MMRM results at Week 12

Treatment	LS Mean	Plc-Adj	p-value
Placebo (vs. All Doses)	-1.96		
Low Doses (0.1 - 0.4 mg)	-2.66	-0.65	0.42
High Doses (1 - 4 mg)	-3.95	-1.98	<0.01

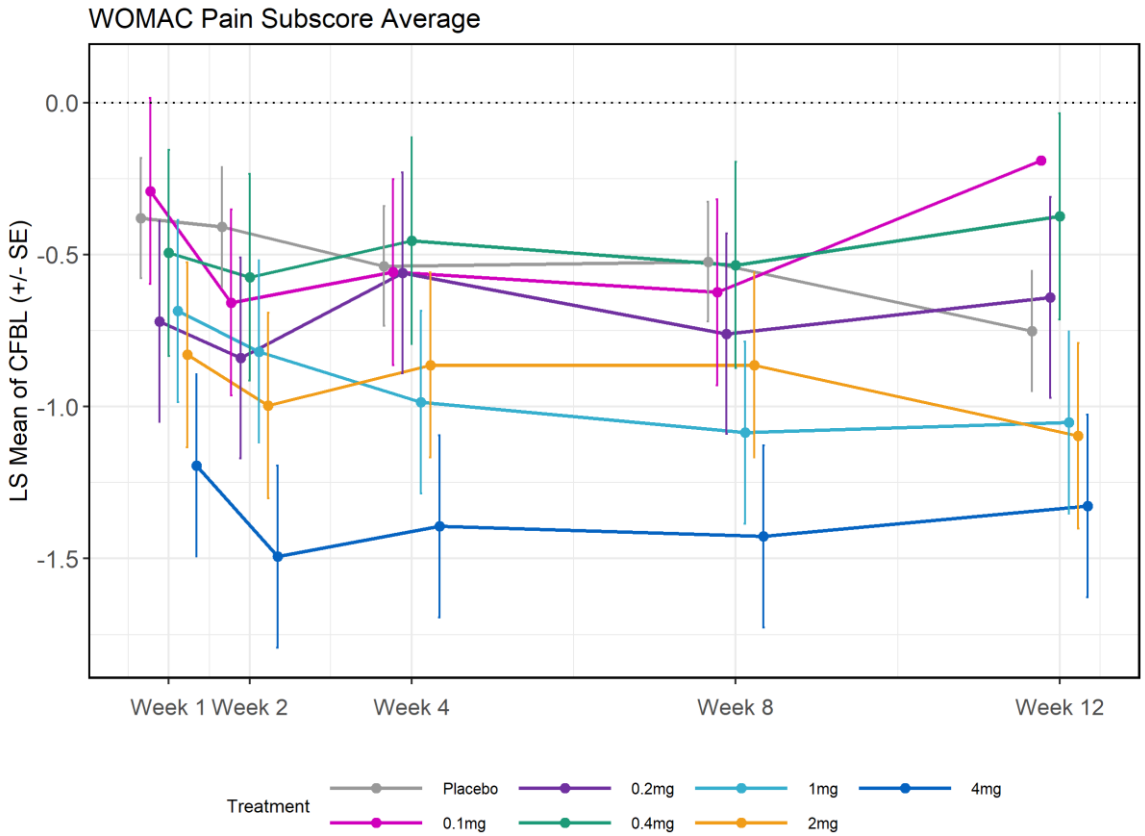
PART A - PAIN – WOMAC-A – 12 WEEK

All Dose Cohorts

WOMAC-A Pain Subscore Items (0-4)

MCID- ≤0.5 on a scale of 0-4

Placebo	n=14
0.1 mg	n=6
0.2 mg	n=5
0.4 mg	n=5
1.0 mg	n=6
2.0 mg	n=6
4.0 mg	n=6



PART A - PAIN – WOMAC-A – 12 WEEK

Grouped Dose Cohorts

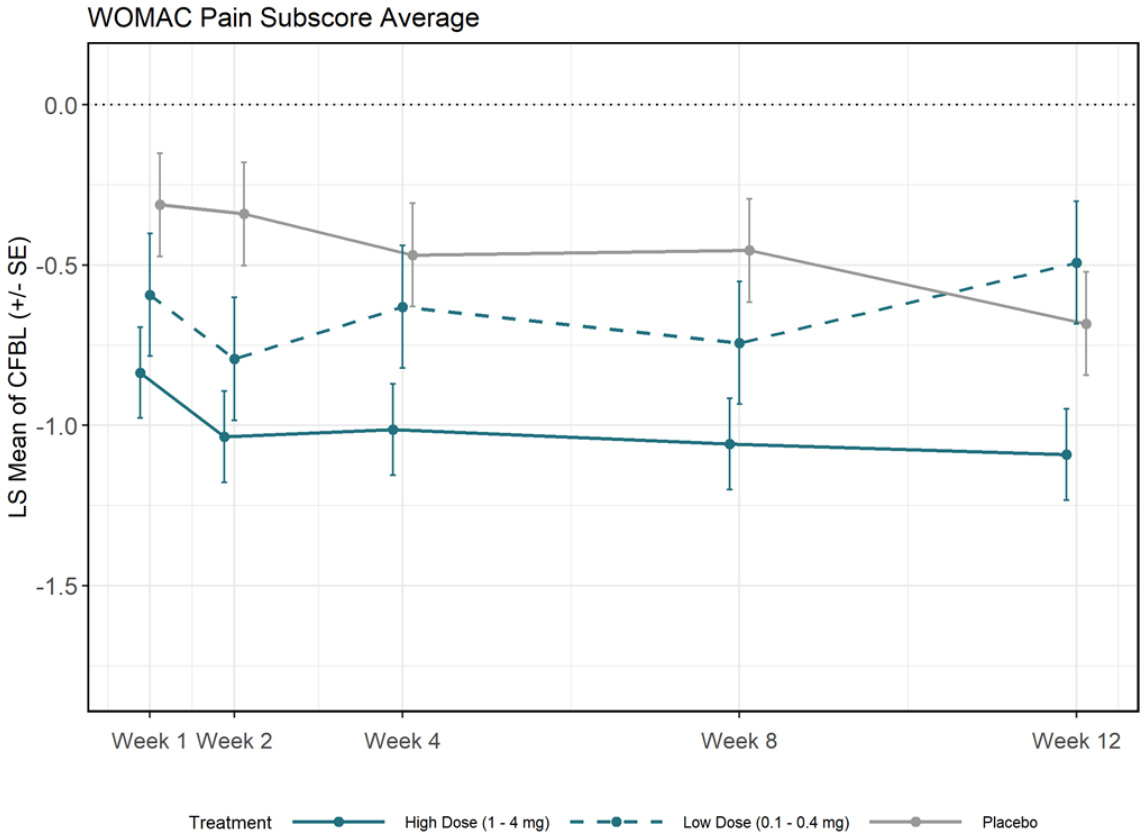
WOMAC-A Pain Subscore Items (0-4)

Low Dose - (0.1, 0.2, 0.4 mg)

High Dose - (1.0, 2.0, 4.0 mg)

MMRM results at Week 12

Treatment	LS Mean	Plc-Adj	p-value
Placebo (vs. All Doses)	-0.74		
Low Doses (0.1 - 0.4 mg)	-0.49	0.23	0.43
High Doses (1 - 4 mg)	-1.09	-0.41	0.07

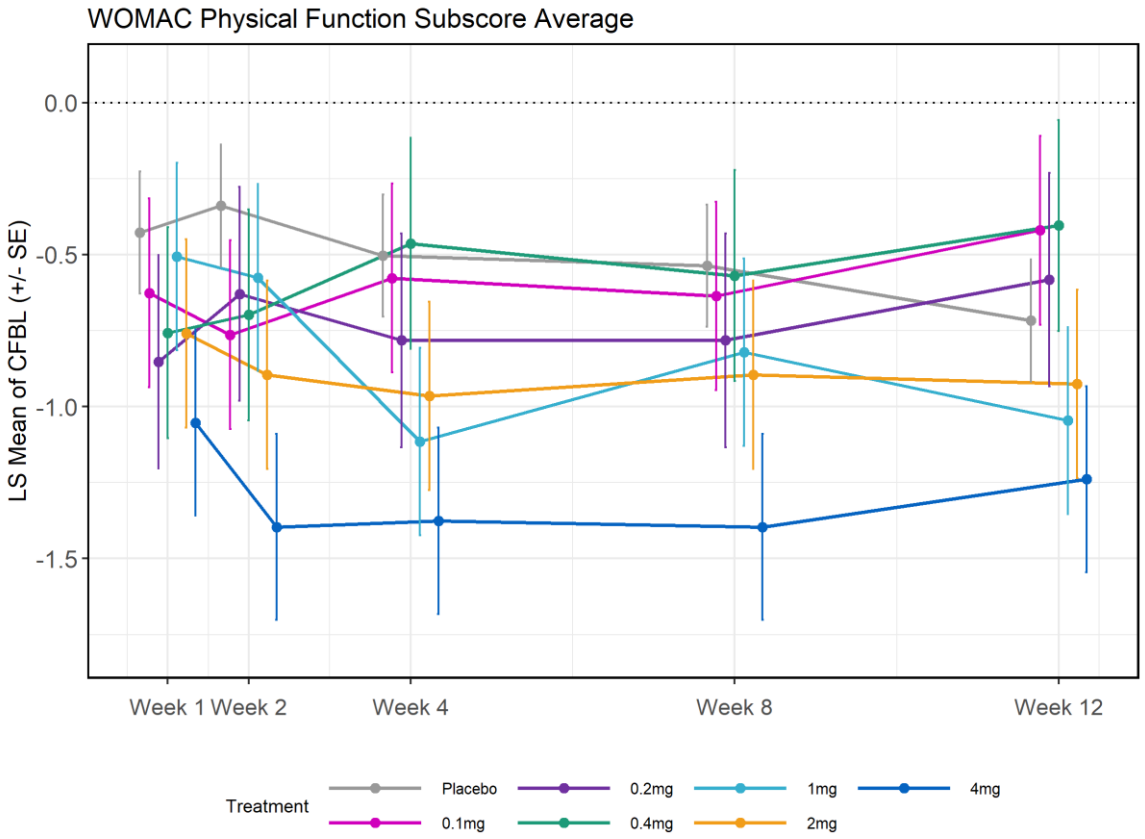


PART A - FUNCTION – WOMAC-C – 12 WEEK

All Dose Cohorts

WOMAC-C Function Subscore Items (0-4)

Placebo	n=14
0.1 mg	n=6
0.2 mg	n=5
0.4 mg	n=5
1.0 mg	n=6
2.0 mg	n=6
4.0 mg	n=6



PART A - FUNCTION – WOMAC-C – 12 WEEK

Grouped Dose Cohorts

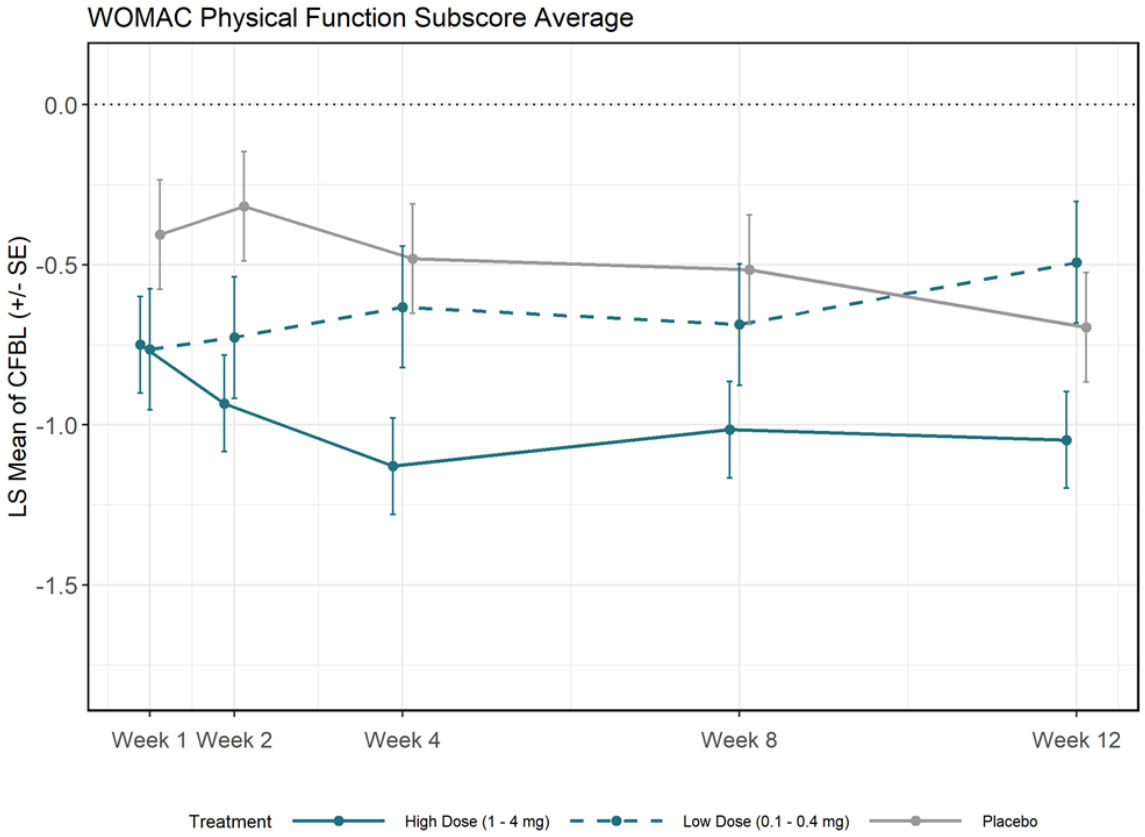
WOMAC-C Function Subscore Items (0-4)

Low Dose - (0.1, 0.2, 0.4 mg)

High Dose - (1.0, 2.0, 4.0 mg)

MMRM results at Week 12

Treatment	LS Mean	Plc-Adj	p-value
Placebo (vs. All Doses)	-0.72		
Low Doses (0.1 - 0.4 mg)	-0.49	0.22	0.43
High Doses (1 - 4 mg)	-1.05	-0.35	0.13

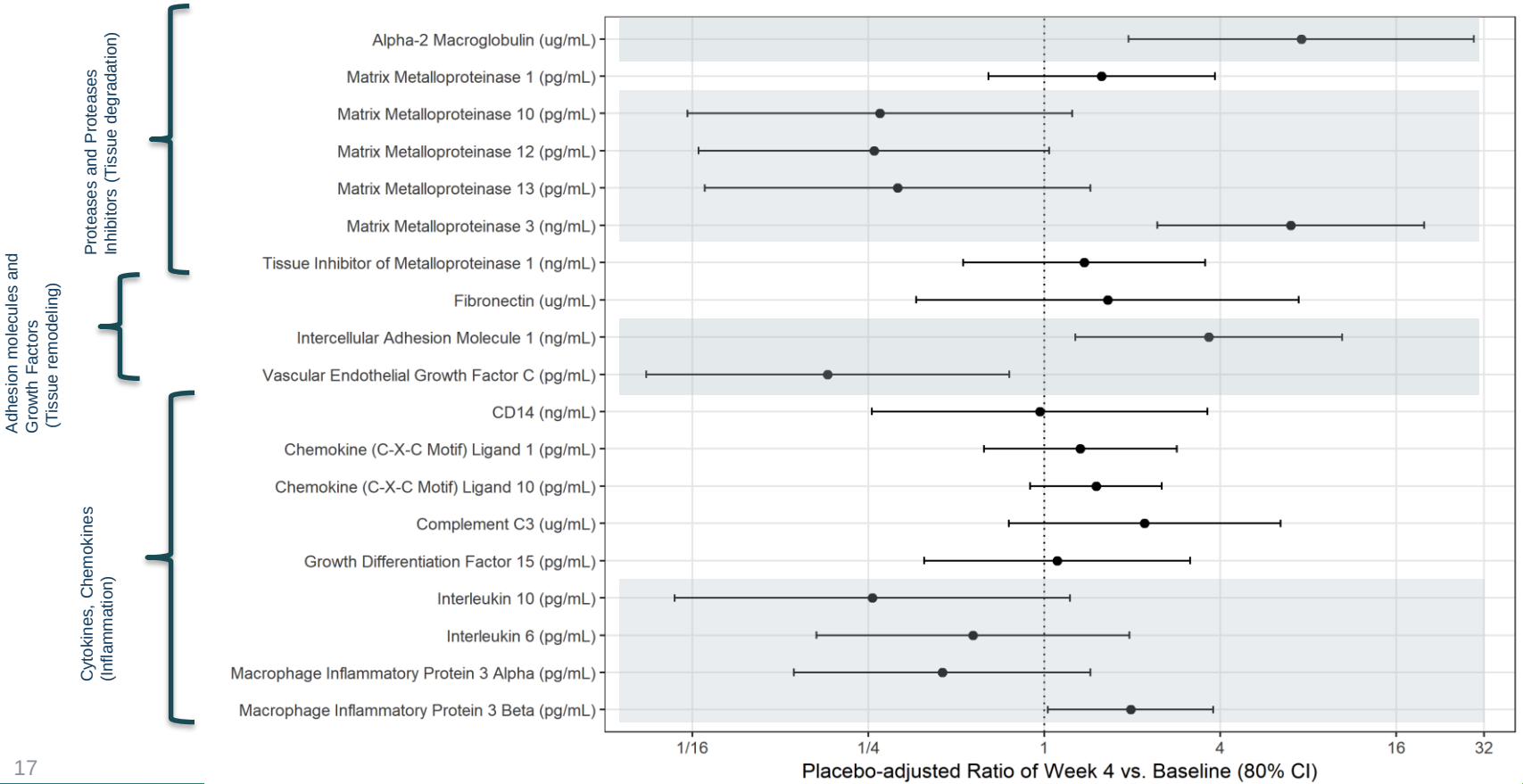


PART A – PATIENT GLOBAL IMPRESSION OF CHANGE - 12 WEEK

Grouped Dose Cohorts

PGI-C Binary Variable*	**Part A (UBX-0101 Intra- Articular Dose in mg) Estimated Probability (95% CI)**		
Dose Group (n)	**Placebo (n=14)**	**Low Doses (n=16)**	**High Doses (n=18)**
Much Improved or Better	42.9 % (20.6 – 68.4%)	50.0 % (40.0-60.0%)	61.1 % (50.0- 66.7%)

PART B - SYNOVIAL FLUID BIOMARKERS – 4 WEEK



PART B – PAIN – WOMAC-A – 4 WEEK

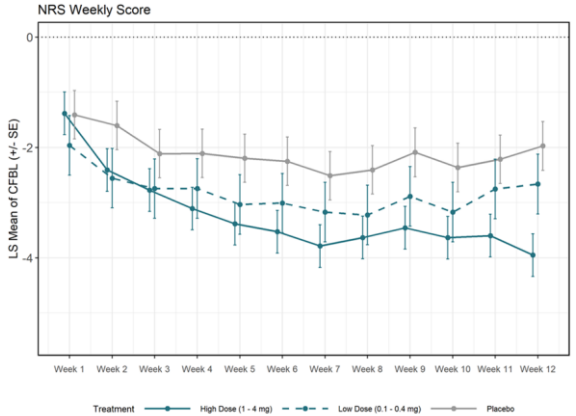
WOMAC-A Pain Subscore Items (0-4)

	WOMAC-A		WOMAC-C	
	CFBL	Pbo-Adj (P-value)	CFBL	Pbo-Adj (P-value)
Placebo (n=10)	-0.72		-0.60	
4.0 mg (n=20)	-0.87	-0.15 (0.62)	-0.77	-0.17 (0.60)

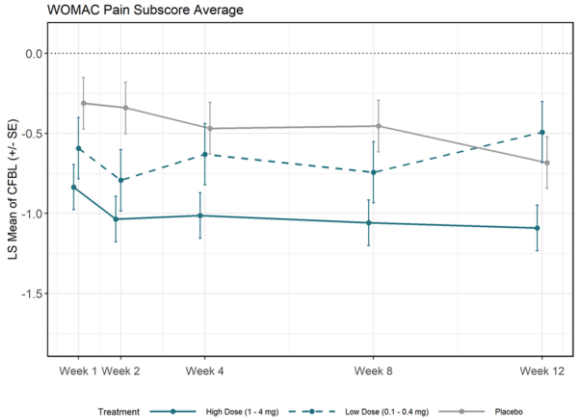
Part B procedure for optimal collection of synovial fluid following treatment included complete drainage of the knee, and if fluid yield is insufficient, introducing saline and then repeating the withdrawal

UBX0101 – CLINICAL DATA ACROSS MULTIPLE ENDPOINTS SHOW PROMISE AS THERAPEUTIC

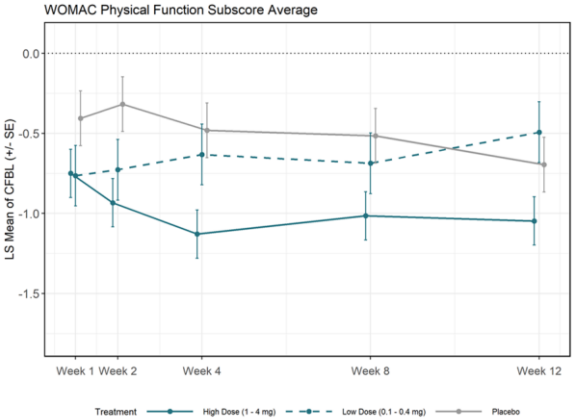
NRS Score



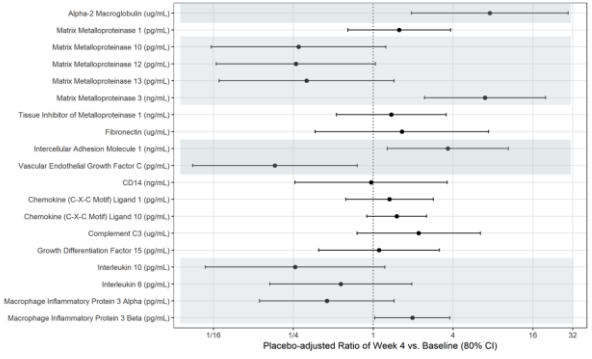
WOMAC-A



WOMAC-C



Biomarkers



Health·span |helth' span| *noun*

The period of one's life unburdened by the diseases of aging

See also: anti-aging, healthy longevity

HEALTHSPAN