

VISIONARY-MS

Update to a Phase 2 clinical trial of catalytic gold nanocrystals, CNM-Au8, for the treatment of chronic optic neuropathy

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For the VISIONARY-MS Investigators

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Disclosures

I am an employee of Clene Nanomedicine, Inc.
and receive salary and stock options

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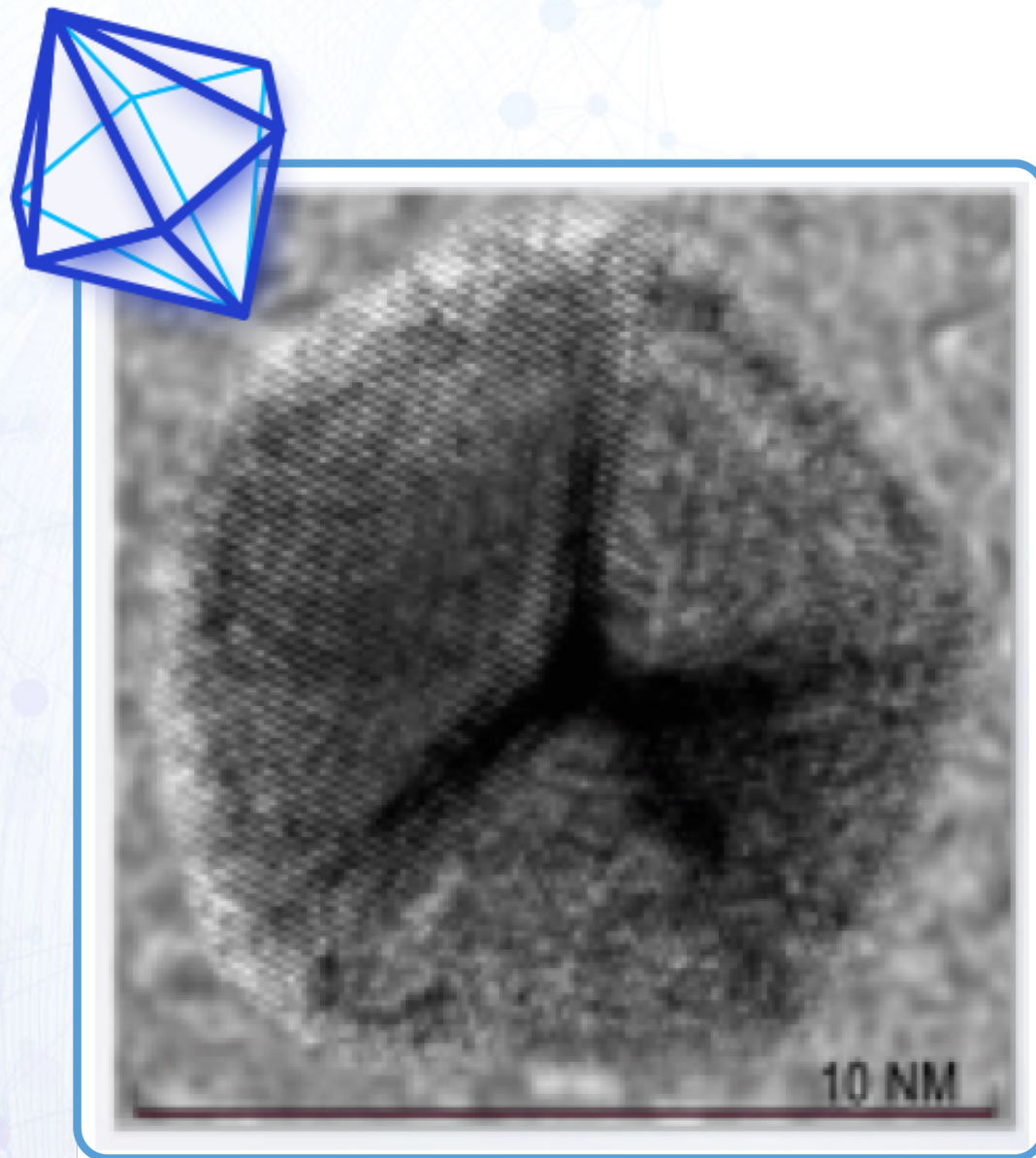
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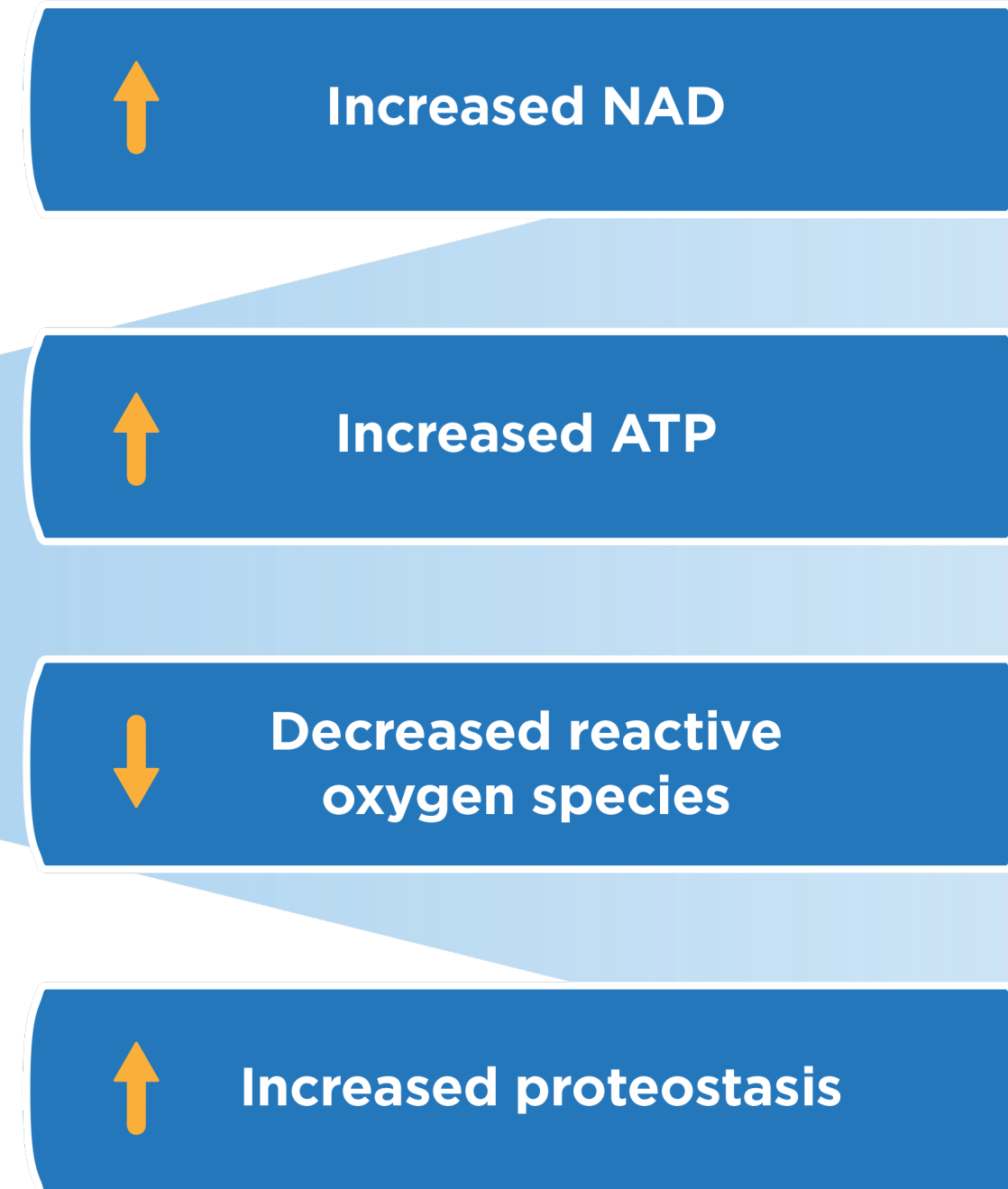
Dr. Richard Macdonell
MD, FRACP, FAFRM

CNM-Au8 | MoA: Nanocatalytic Electron Transfer

Catalytic Gold Nanocrystals



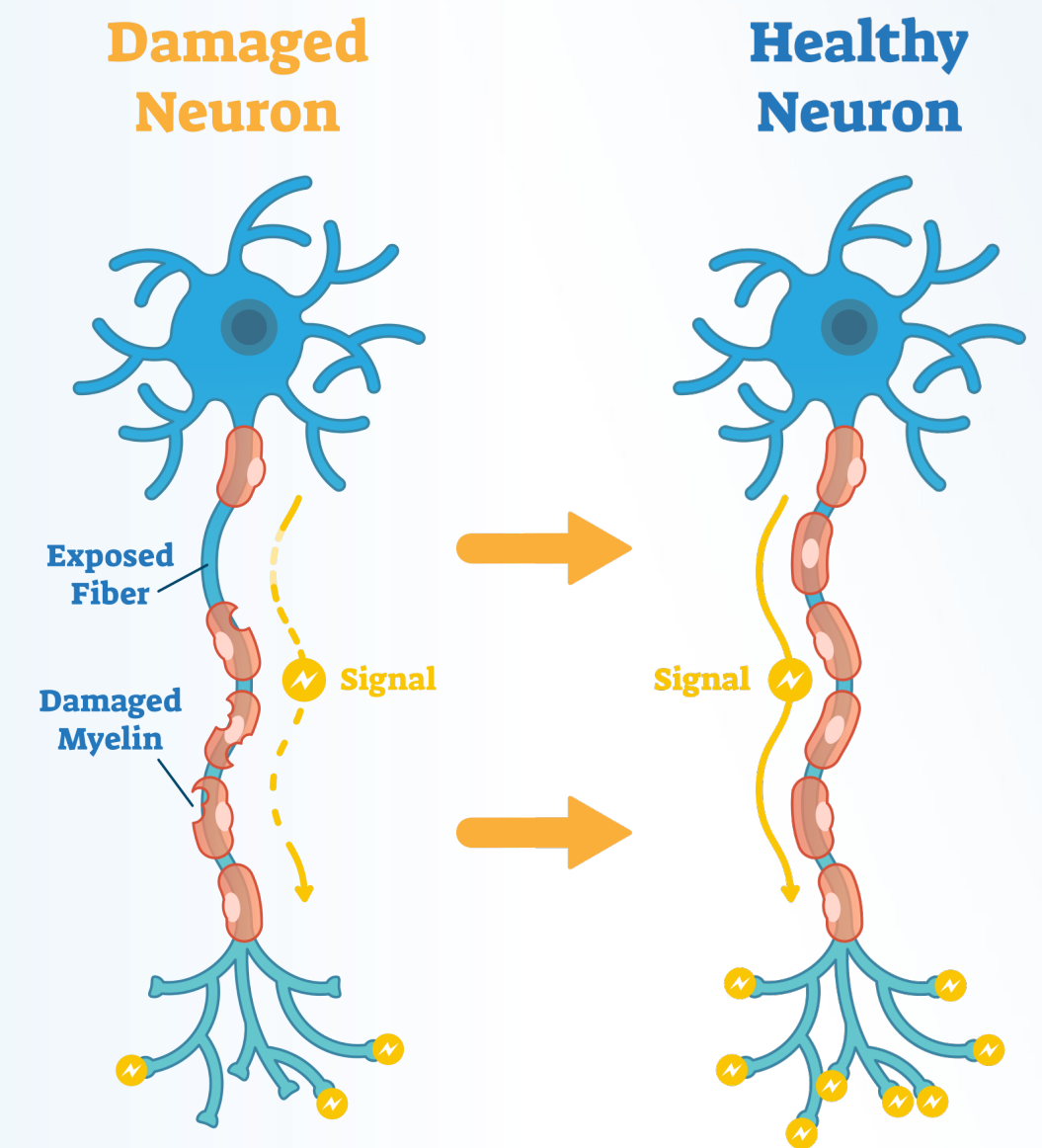
Bioenergetic Mechanism



Enhanced Disease Response



Remyelination



Neuro Repair



Background DMT Treatment & Demographics

13-January-2021 Blinded Data Update

Baseline Demographics

Baseline Values	Subjects n (%)	Age [yrs.] mean (SD)	EDSS mean (SD)	Time from MS Onset [yrs.] mean (SD)	ON History [%]
All	52 (100%)	38.0 (8.9)	1.8 (1.5)	6.0 (3.8)	76%
Female	37 (71%)	37.7 (8.3)	1.7 (1.6)	6.4 (3.8)	73%
Male	15 (29%)	40.1 (9.7)	2.0 (1.4)	5.1 (3.8)	80%

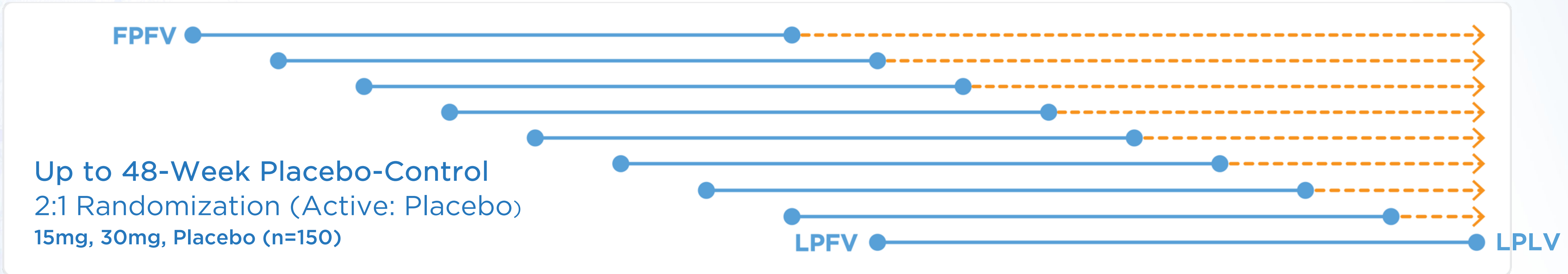
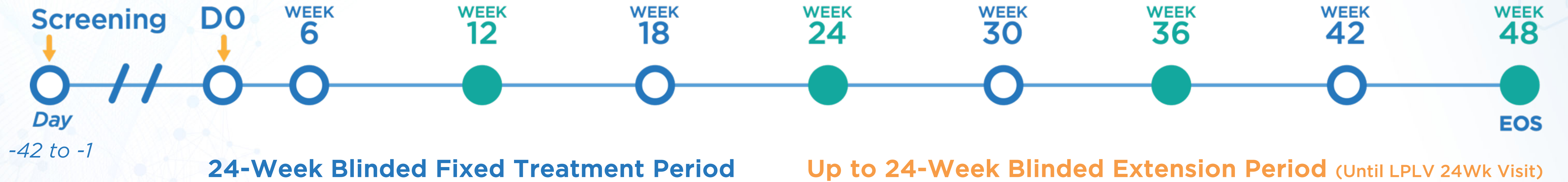
DMT Background Treatment

Monoclonal Antibody ¹ n (%)	Oral Therapy ² n (%)	Injectable (<i>Glatiramer acetate</i>) n (%)	No DMT n (%)
27 (52%)	19 (36.5%)	2 (4%)	4 (8%)
19 (51%)	14 (38%)	2 (5%)	2 (5%)
8 (53%)	5 (33%)	0 (0%)	2 (13%)

¹ Monoclonal antibody includes alemtuzumab, natalizumab, rituximab, ocrelizumab.

² Oral includes fingolimod, dimethyl fumarate, teriflunomide, thyroxine, and oral combinations.

Treatment of Visual Pathway Deficits In Chronic Optic Neuropathy for Assessment of Remyelination in Non-Active Relapsing MS



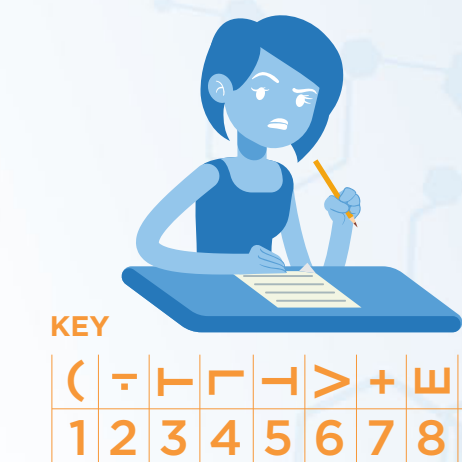
1^o Change in Low Contrast Letter Acuity (LCLA)
At Week 24

2^o Change Composite Clinical Response
9HPT / SDMT / T25FW / LCLA / EDSS

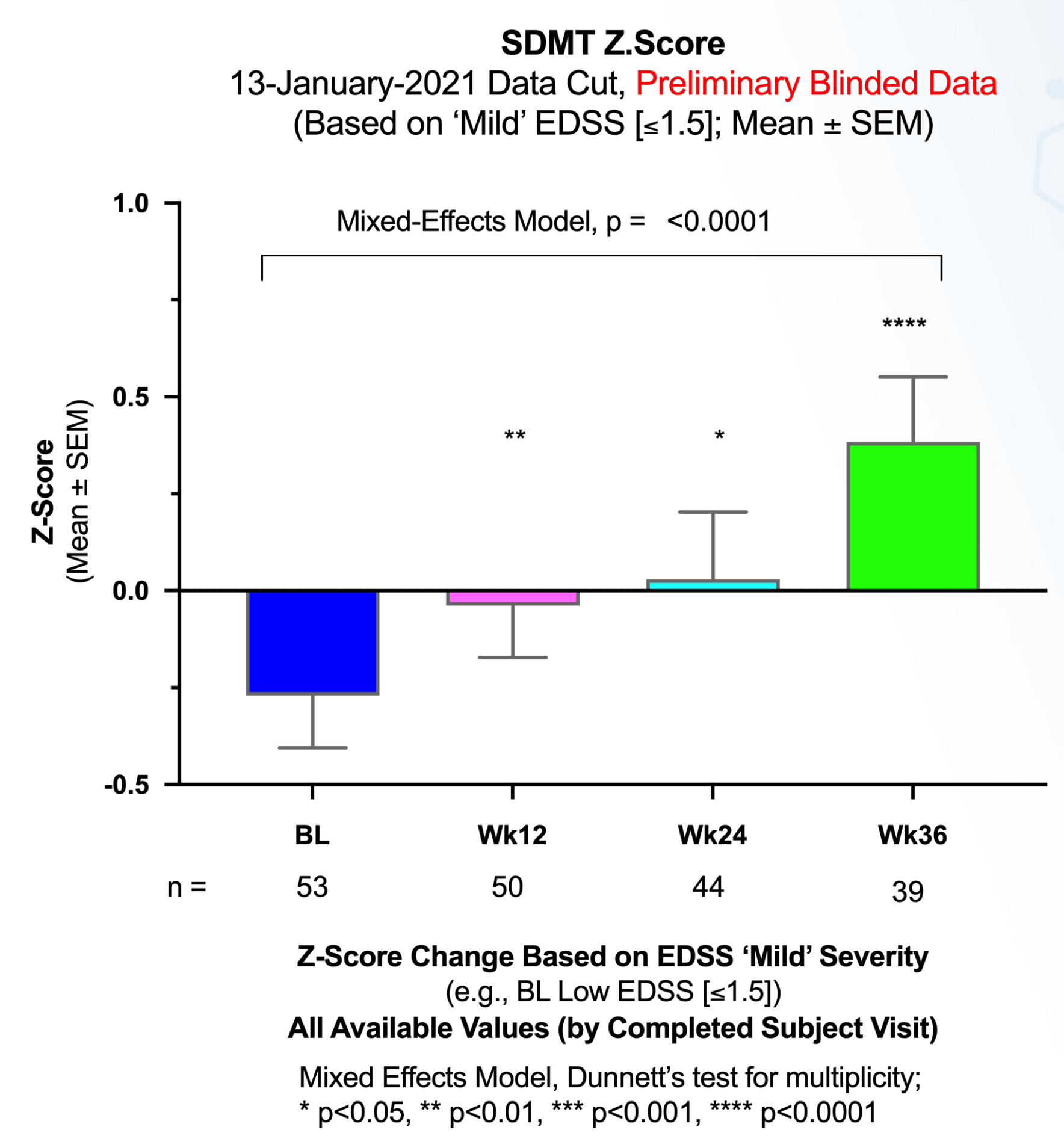
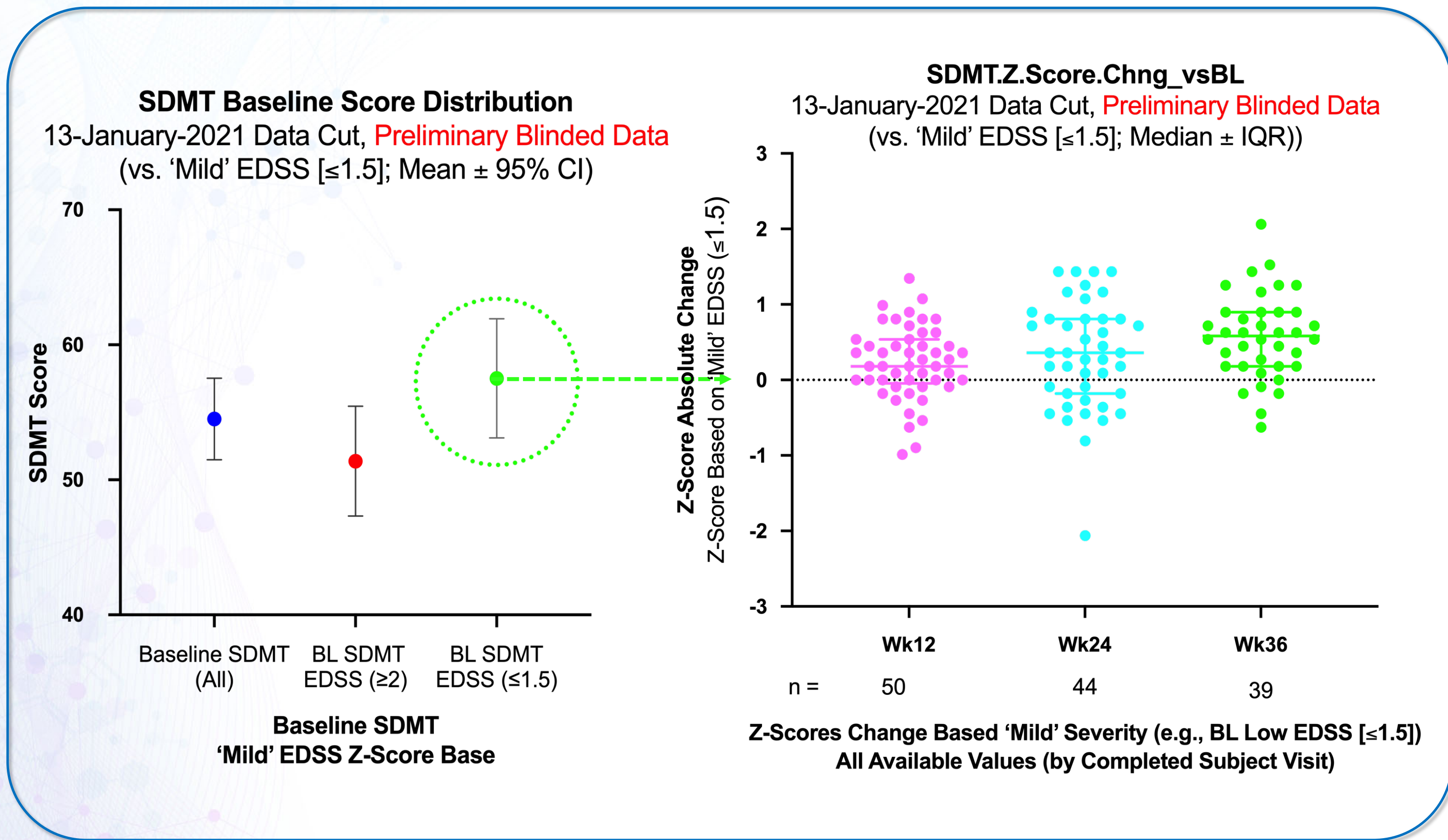
Exploratory Endpoints

- Optical Coherence Tomography (OCT)
- Multi-focal VEP Amplitude & Latency
- Full field-VEP Amplitude & Latency
- MRI Endpoints
- Visual Function (High Contrast)
- PRO / QOL / EDSS

SDMT Z-Score Change



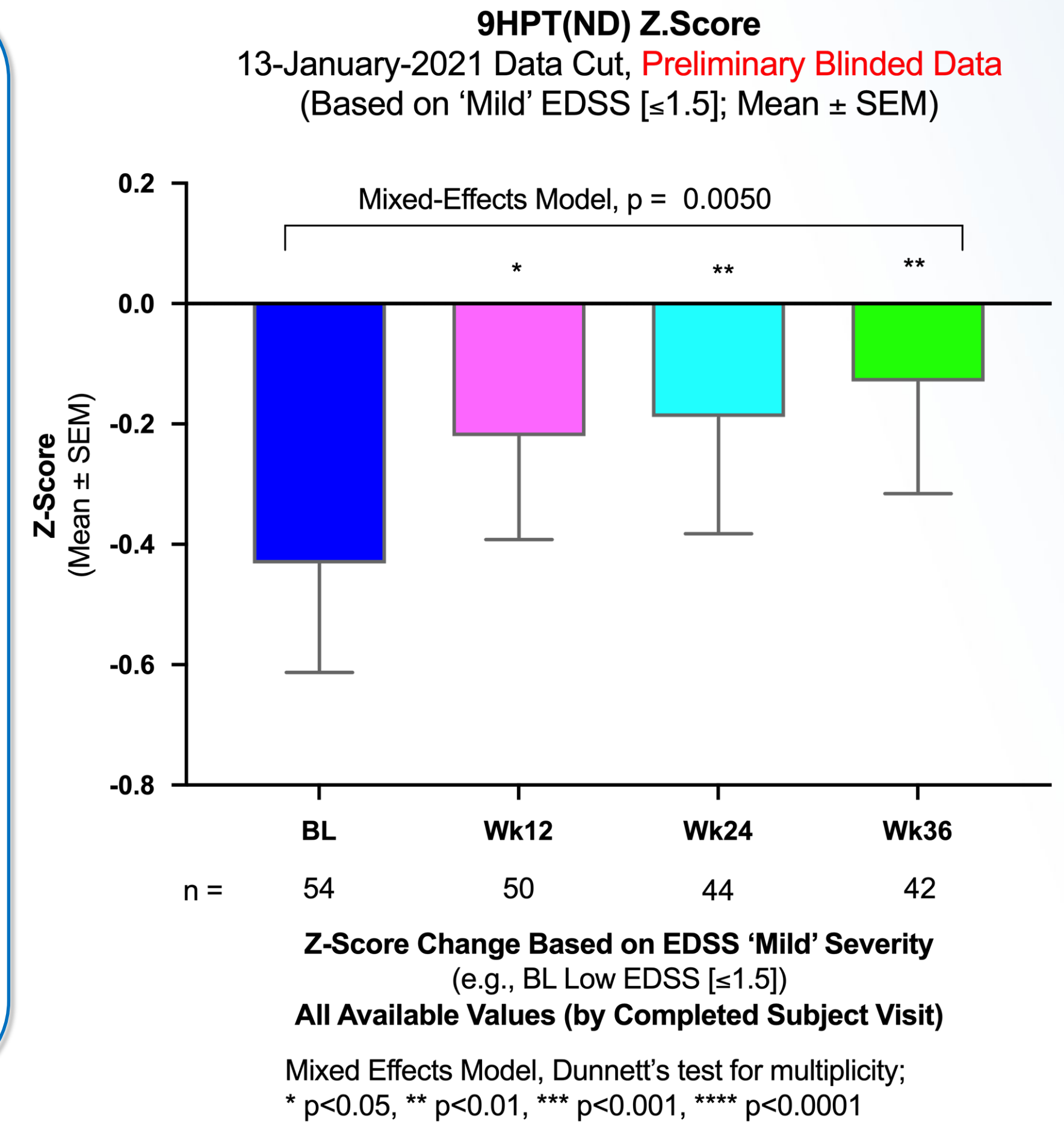
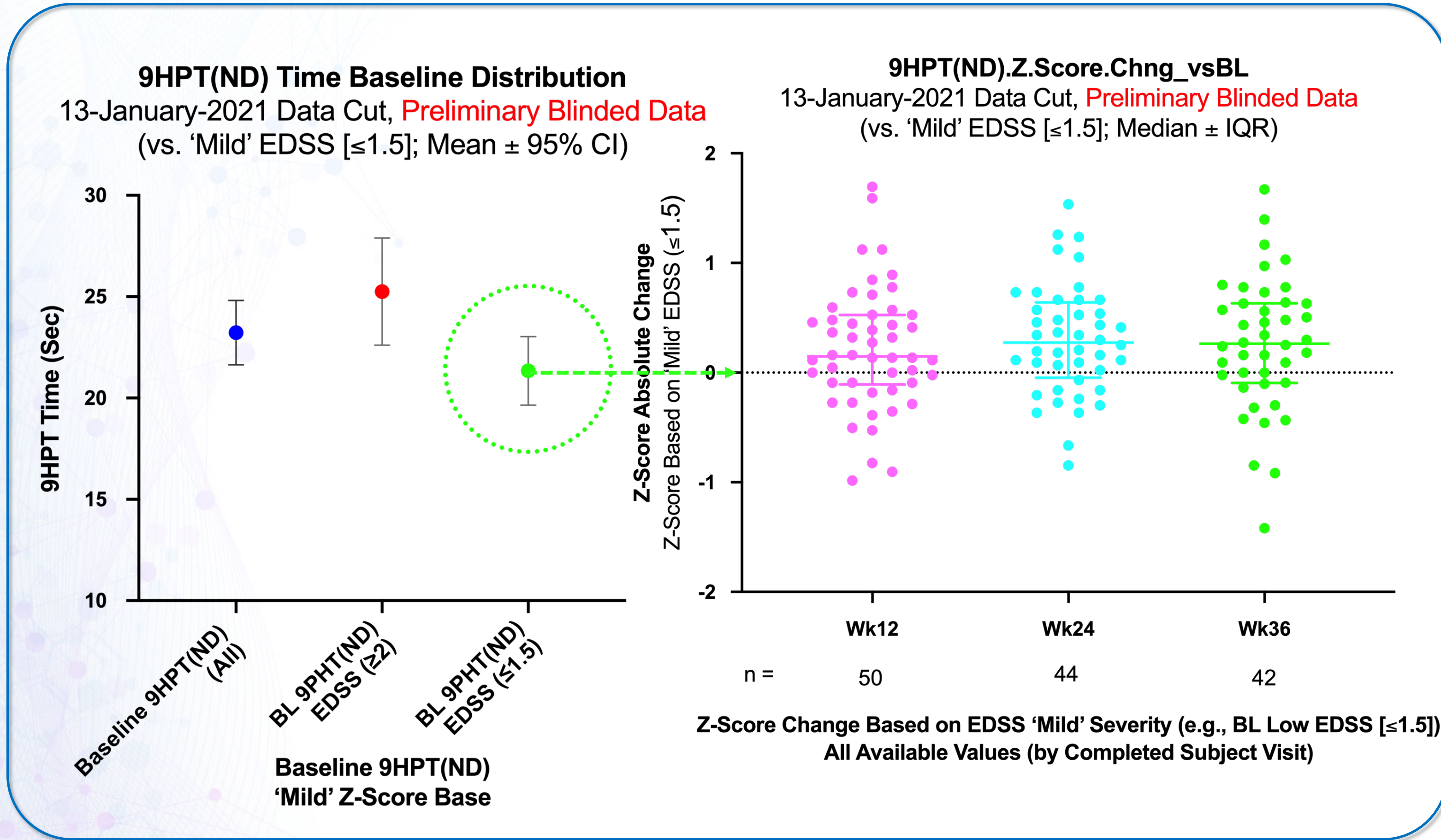
Change in Enrolled Study Population Compared to Baseline (BL) 'Mild' EDSS (≤ 1.5)



9HPT (Non-Dominant) Z-Score Change



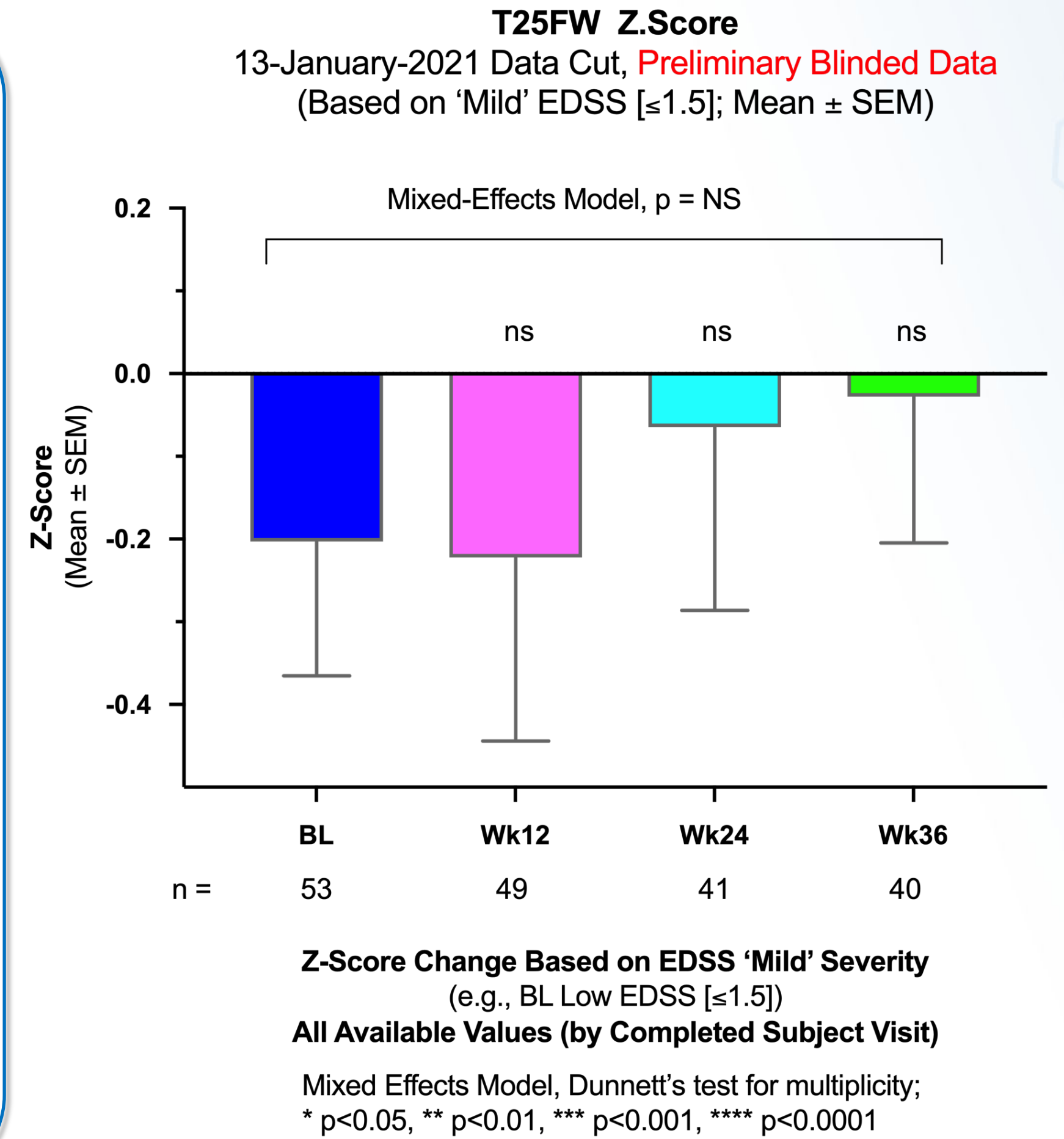
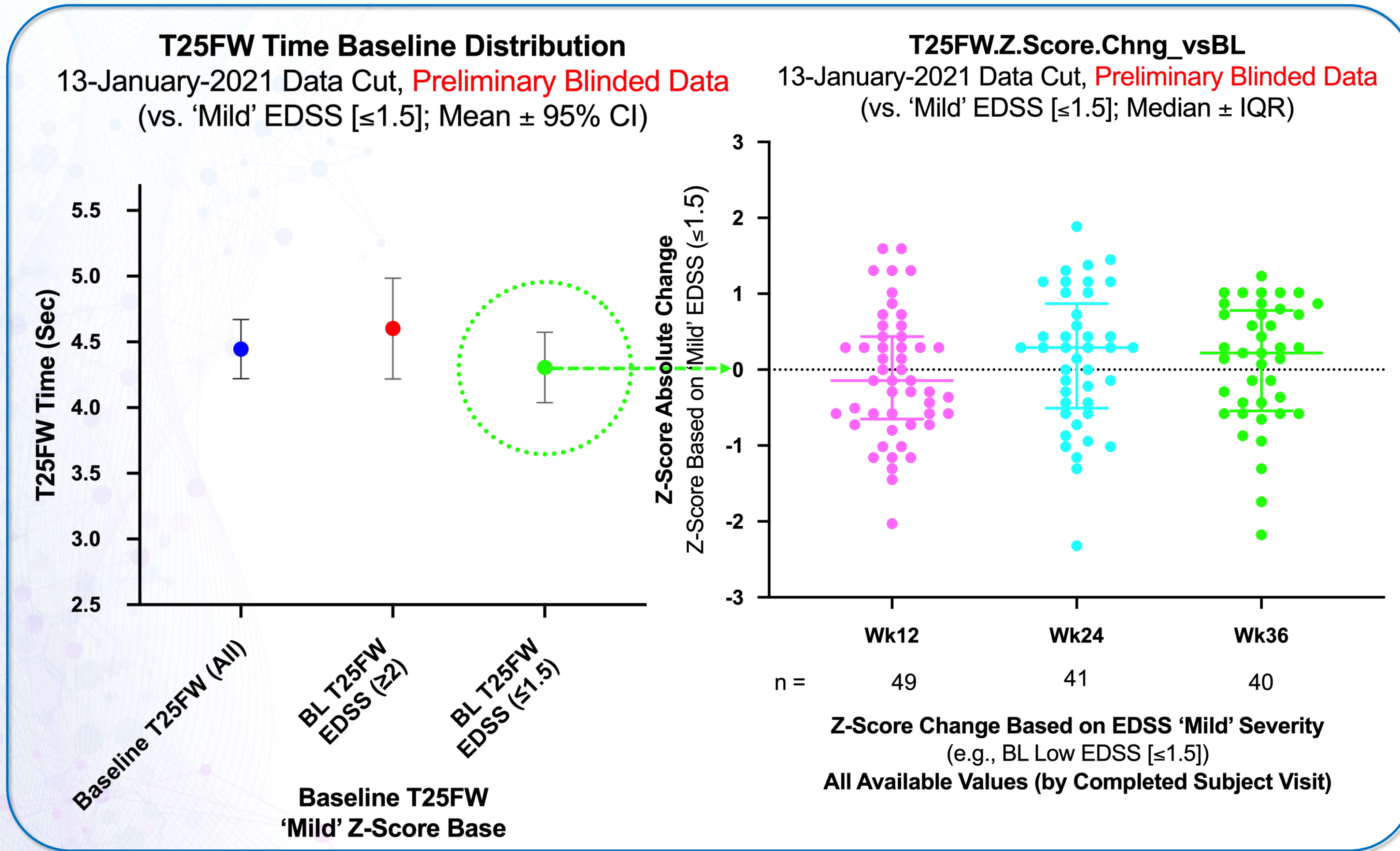
Change in Enrolled Study Population Compared to Baseline (BL) 'Mild' EDSS (≤ 1.5)



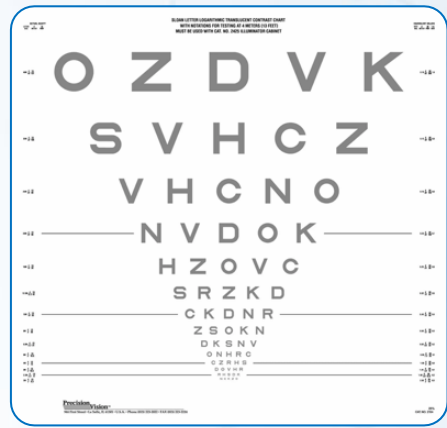
T25FW Z-Score Change



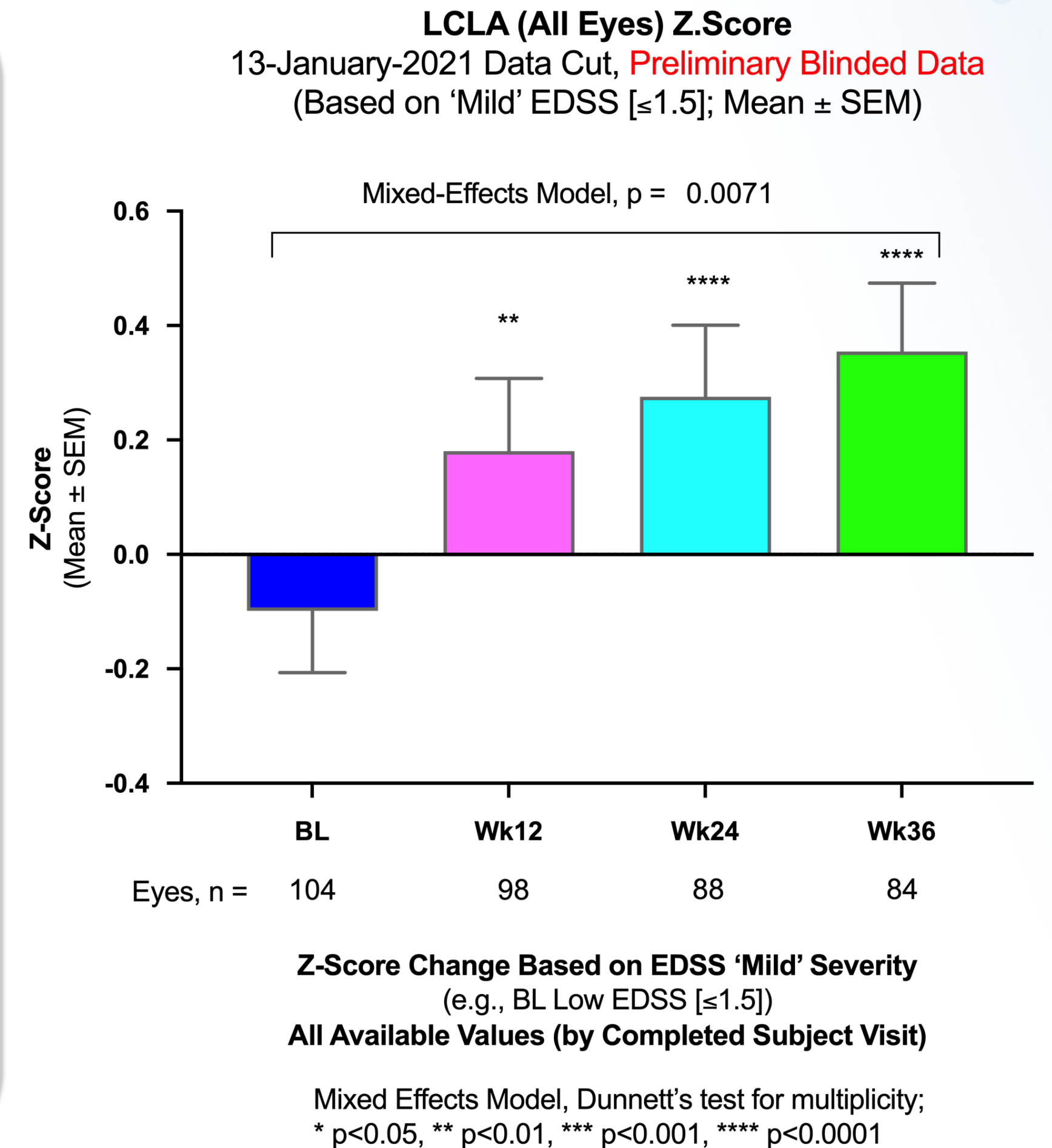
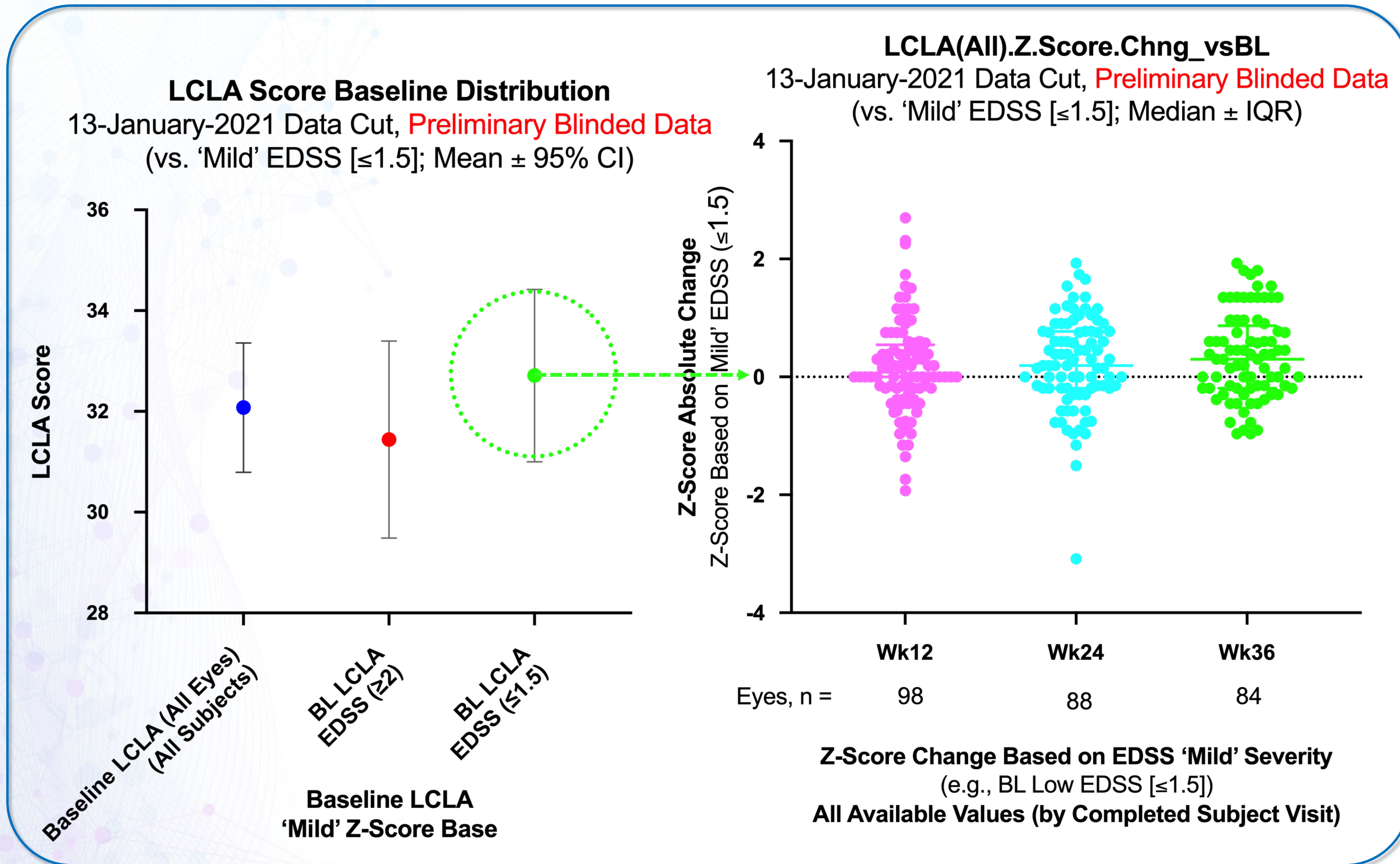
Change in Enrolled Study Population Compared to Baseline (BL) 'Mild' EDSS (≤ 1.5)



LCLA (Best-Corrected) Z-Score Change

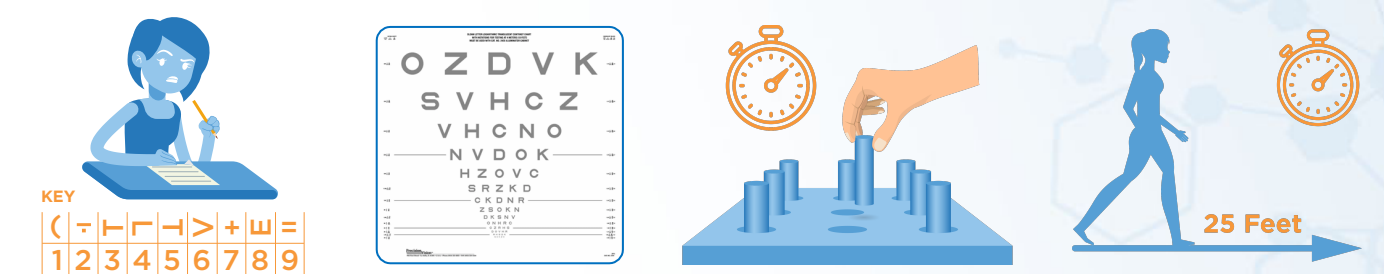


Change in Enrolled Study Population Compared to Baseline (BL) 'Mild' EDSS (≤ 1.5)

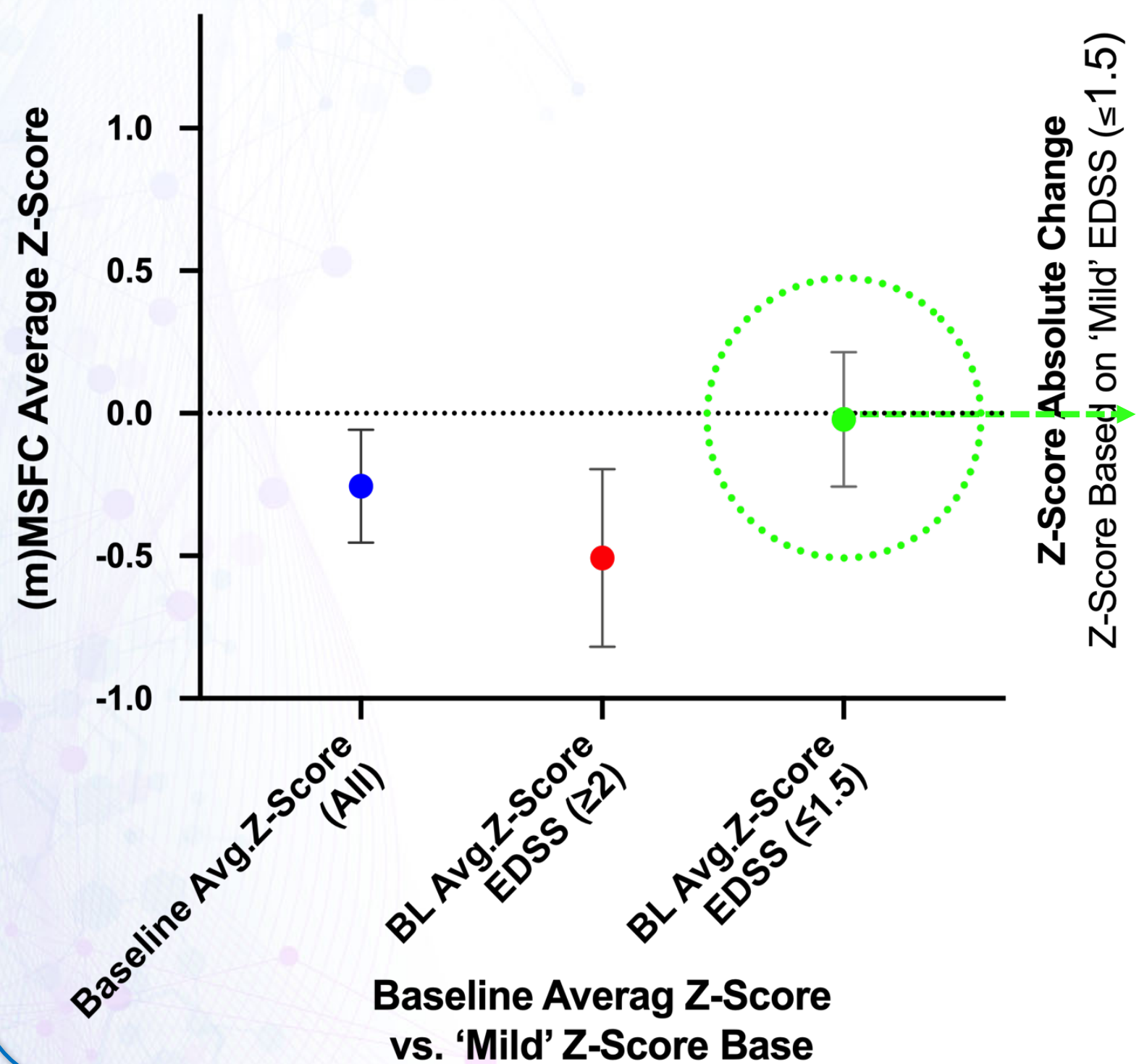


(m)MSFC Mean Z-Score Change

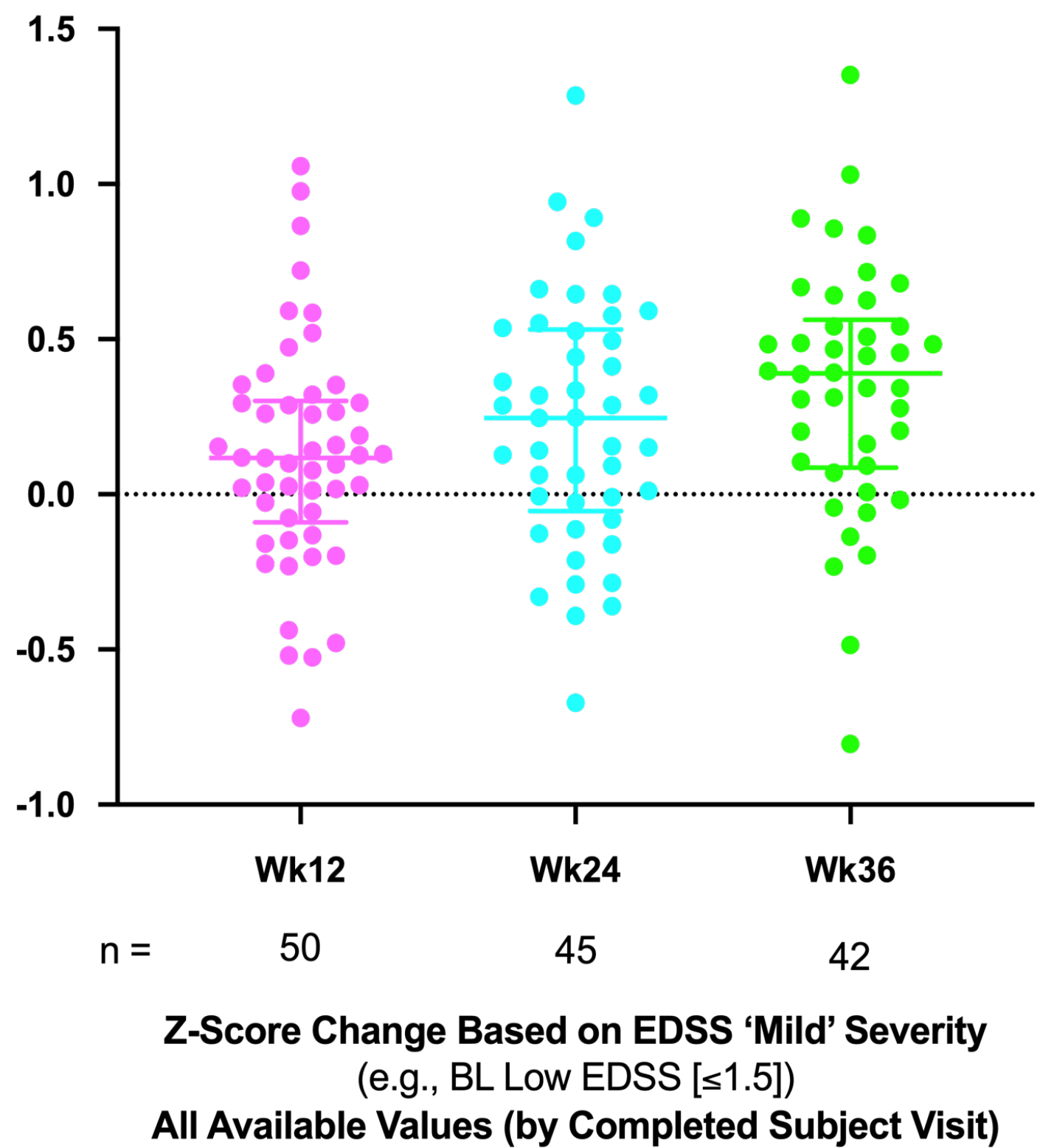
6-component (SDMT, LCLA [L/R], 9HPT [D/ND], T25FW)



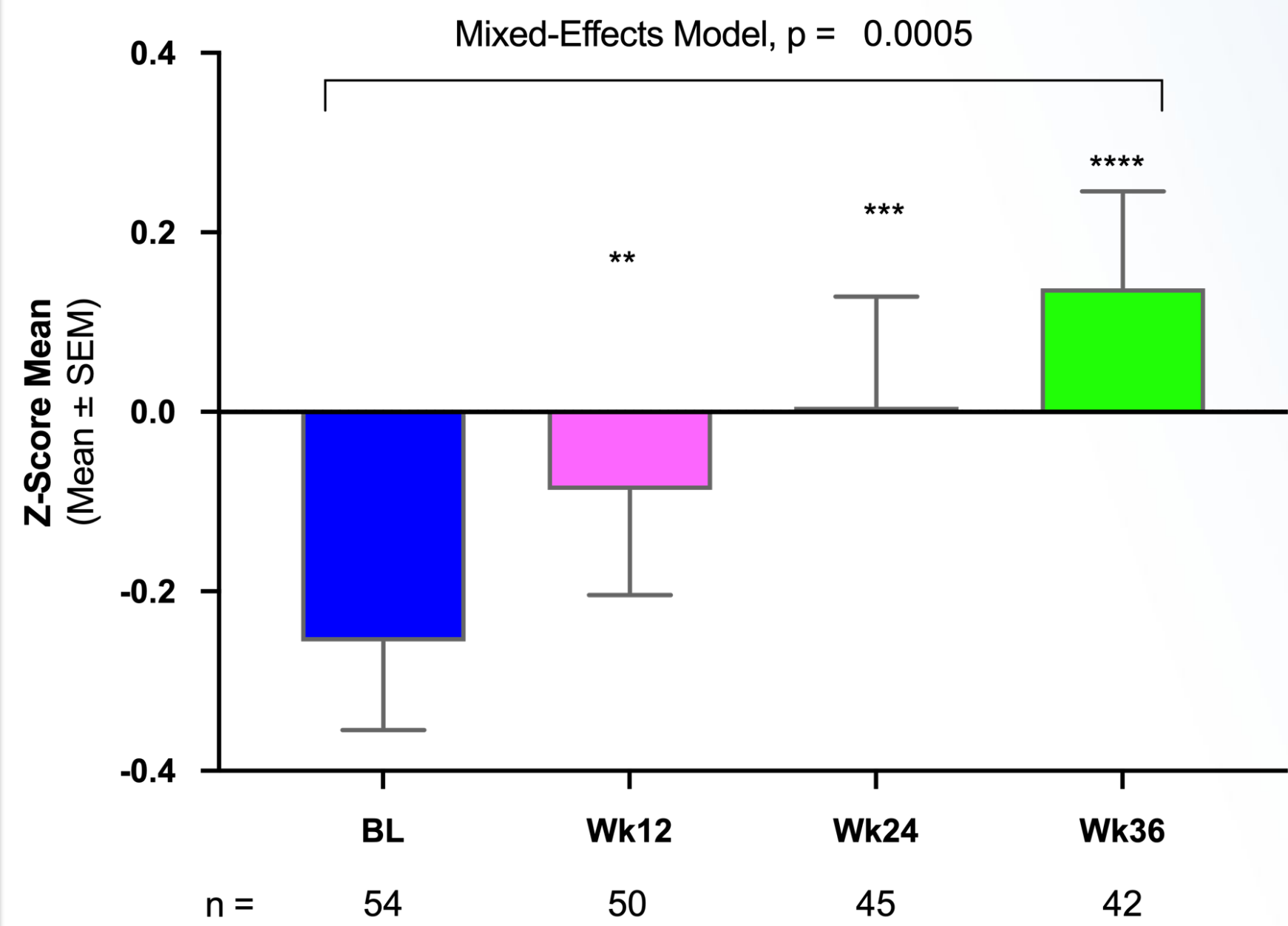
(m)MSFC Avg Z-Score Baseline Distribution
13-January-2021 Data Cut, **Preliminary Blinded Data**
(vs. 'Mild' EDSS [≤ 1.5]; Mean \pm 95% CI)



(m)MSFC(6)Avg.Z.Score.Chng_vsBL
13-January-2021 Data Cut, **Preliminary Blinded Data**
(vs. 'Mild' EDSS [≤ 1.5]; Median \pm IQR)



(m)MSFC 6-component Average Z-Score
13-January-2021 Data Cut, **Preliminary Blinded Data**
(Based on 'Mild' EDSS [≤ 1.5]; Mean \pm SEM)



Z-Score Change Based on EDSS 'Mild' Severity
(e.g., BL Low EDSS [≤ 1.5])
All Available Values (by Completed Subject Visit)

Mixed Effects Model, Dunnett's test for multiplicity;
* p<0.05, ** p<0.01, *** p<0.001, **** p<0.0001

Conclusions

- VISIONARY-MS is an innovative Phase 2 study examining the potential for CNM-Au8 to promote neurological improvement in a stable RMS population with chronic visual impairment, as an adjunct to approved DMTs
- CNM-Au8 is a novel, nanocatalytic therapy shown to promote remyelination and neuroprotection via increasing bioenergetic capacity, enhancing protein homeostasis, and reducing harmful ROS
- These interim, blinded data support the potential for CNM-Au8 therapy to demonstrate meaningful neurological improvement in patients with MS