



HARNESSING THE POWER OF THE INNATE IMMUNE SYSTEM

Immunology & Inflammation Focus : Two Therapeutic Platforms

INMB
Nasdaq

Investor Presentation April 2024 v2



FORWARD LOOKING STATEMENTS

This presentation contains “forward-looking statements” Forward-looking statements reflect our current view about future events. When used in this presentation, the words “anticipate,” “believe,” “estimate,” “expect,” “future,” “intend,” “plan,” or the negative of these terms and similar expressions, as they relate to us or our management, identify forward-looking statements. Such statements, include, but are not limited to, statements contained in this presentation relating to our business strategy, our future operating results and liquidity and capital resources outlook. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. They are neither statements of historical fact nor guarantees of assurance of future performance. We caution you therefore against relying on any of these forward-looking statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, without limitation, our ability to raise capital to fund continuing operations; our ability to protect our intellectual property rights; the impact of any infringement actions or other litigation brought against us; competition from other providers and products; our ability to develop and commercialize products and services; changes in government regulation; our ability to complete capital raising transactions; and other factors relating to our industry, our operations and results of operations. There is no guarantee that any specific outcome will be achieved. Investment results are speculative and there is a risk of loss, potentially all loss of investments. Actual results may differ significantly from those anticipated, believed, estimated, expected, intended or planned. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We cannot guarantee future results, levels of activity, performance or achievements. Except as required by applicable law, including the securities laws of the United States, we do not intend to update any of the forward-looking statements to conform these statements to actual results. INB03™, XPro1595, and INKmune™ are still in clinical trials or preparing to start clinical trials and have not been approved by the US Food and Drug Administration (FDA) or any regulatory body and there cannot be any assurance that they will be approved by the FDA or any regulatory body or that any specific results will be achieved. Forward-looking statements are subject to many risks, uncertainties and other factors that could cause our actual results, and the timing of certain events, to differ materially from any future results expressed or implied by these forward-looking statements, including, but not limited to, the risks, uncertainties, and other factors described in our filings with the U.S. Securities and Exchanges Commission, including our most recent reports on Form 10-K, 10-Q, and 8-K, and any amendments thereto.



Large Insider Ownership and All Common Capital Structure

Targeting Innate Immune Dysfunction

INMB Nasdaq

PRICE(3/28/24) COMMON S/O

\$11.63 ~18.0M

MARKET CAP CASH/DEBT (12/31/23)

~\$200M ~\$35.8M/\$12M

PRICE(3/28/23) AVG. VOLUME

\$5.87-14.74 ~80,000

INSIDER OWNERSHIP

~24%

- **Material Clinical Data in 2024/2025**
 - Data from two biologic platforms in the clinic in 2024 and 2025
- **Cap structure**
 - Large insider ownership
 - All common stock, no warrants or preferred
- **Attractive sum of parts value**
 - XPro™ + INKmune™
 - Multiple clinical programs in P2 and P1
 - Alzheimer's market WW: > 55 million people
 - Prostate market WW: > 1.5m cases per year
 - Pipeline extends into many neurological conditions and many types of cancers



Investment Snapshot



De-Risked, Phase 2 Asset with Substantial Clinical Safety & Efficacy Data



Leader in Neuroinflammation with next generation TNF inhibitor able to selectively neutralize soluble TNF



Neuroinflammation plays a key role in nearly all CNS disease. Large markets with significant unmet Medical Needs



Experienced Team with Track Record of Success Leading in Neurodegeneration and Inflammation



Significant Near and Long-Term Milestones



Two Product Platforms Driving a Pipeline with Multiple Shots on Development Goals

Two Platforms Modulating the Innate Immune System to Fight Disease and Help the Body Heal Itself



DEVELOPMENT PIPELINE

DN-TNF PLATFORM

DESEASE FIELD

PRE-CLINICAL

PHASE I

PHASE II (POC)

PIVOTAL

EST.NEXT
MILESTONE

XPro™

Early Alzheimer's
Disease



Full enrollment mid-2024
Topline Data 6m later

XPro™

Treatment Resistant
Depression



P2 Start 2024

NK PRIMING PLATFORM

DESEASE FIELD

PRE-CLINICAL

PHASE I/II

PHASE II (POC)

PIVOTAL

EST.NEXT
MILESTONE

INKmune™

metastatic Castrate
Resistant Prostate
Cancer




Open label
data 2024



Anticipated Milestones in 2024 and 2025

Key Upcoming Clinical & Regulatory Milestones

	<u>EVENT</u>	<u>EXPECTED TIMING</u>
XPro™	Complete Phase 2 AD enrollment	Mid 2024
	Topline Phase 2 AD data	6m from Last Patient Enrolled
	End of Phase 2 FDA Meeting AD	Mid 2025
	Pre-clinical Anti-AB and XPro Data	2H 2024
	Initiate Phase 2 TRD trial	2H 2024
INKmune™	Complete Phase 1 mCRPC enrollment	3Q 2024
	Phase 1 open label mCRPC data	2024
	Topline Phase 2 mCRPC data	2H 2025
	End of Phase 2 FDA Meeting mCRPC	4Q 2025 or 1Q 2026



The Match that lights the Fire...

NEUROINFLAMMATION

is a critical driver of the pathogenesis and progression of Alzheimer's disease



Decades of data connects TNF and neuroinflammation with AD

PubMed 2023: >1500 papers on neuroinflammation and AD

“Current evidence suggests that neuroinflammation has a vital role in the pathogenesis and progression of Alzheimer’s disease.”

— Leng F, Edison P. *Nature Reviews Neurology*. 2020

“In Alzheimer's disease, neuroinflammation, instead of being a mere bystander activated by emerging senile plaques and neurofibrillar tangles, contributes as much or more to the pathogenesis as do the plaques and tangles themselves.”

— Heneka MT, et al. *Lancet Neurol*. 2015

Immune attack: the role of inflammation in Alzheimer disease

Frank L. Heppner^{1,2}, Richard M. Ransohoff³ and Burkhard Becher⁴

Neuroinflammation in Alzheimer's Disease

Michael T. Heneka, MD^{1,2}, Monica J. Carson, PhD³, Joseph El Khoury, MD⁴, Gary E. Landreth, PhD⁵, Frederik Brosseron, PhD², Douglas L. Feinstein, PhD⁶, Andreas H. Jacobs

Review

Neuroinflammation in Alzheimer's Disease

Isaac G. Onyango^{1,2}, Gresten V. Jauregui³, Mária Čarná¹, James P. Bennett Jr.² and Gorazd B. Stokin^{1,3,4}

Systemic inflammation and disease progression in Alzheimer disease

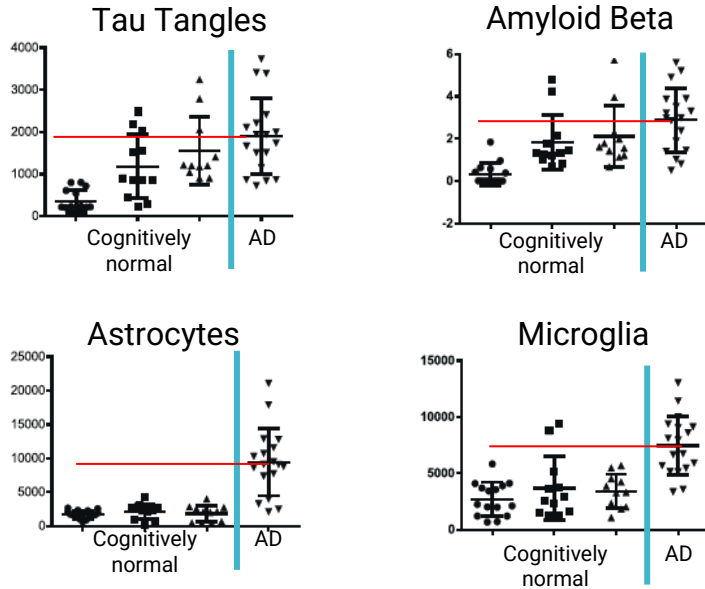
C. Holmes, C. Cunningham, E. Zotova, J. Woolford, C. Dean, S. Kerr, D. Culliford, V.H. Perry

Inflammation as a central mechanism in Alzheimer's disease

Jefferson W. Kinney^{a,*}, Shane M. Bemiller^b, Andrew S. Murtishaw^a, Amanda M. Leisgang^a, Arnold M. Salazar^a, Bruce T. Lamb^b



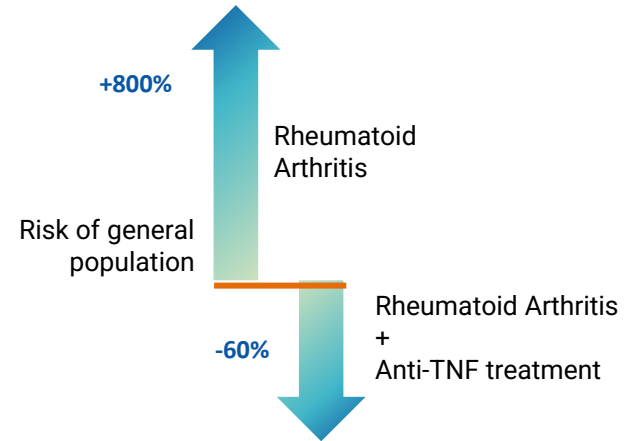
TNF Drives Neuroinflammation and Risk of AD



Amyloid and tau is present within the brains of AD patients AND cognitively normal people. Inflammation is increased in AD brains but NOT cognitively normal people.

Adapted from: PMID 30336198

TNF inhibitors reduce risk of developing AD

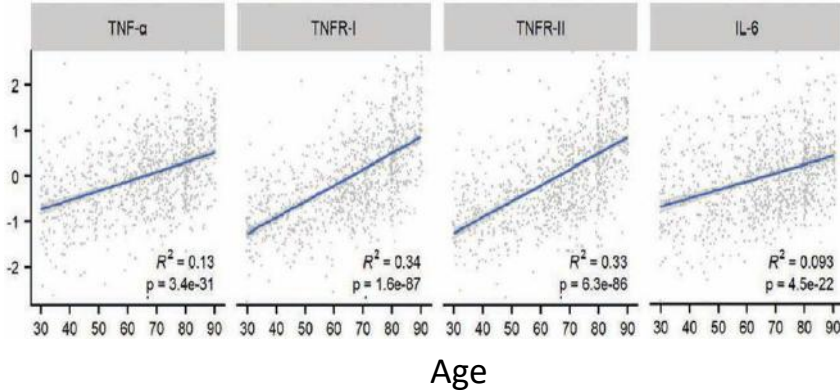


Epidemiological Studies including a meta-analysis of more than 60 Million cases Linking **TNF Blocking Agents** to Reduced Risk of AD

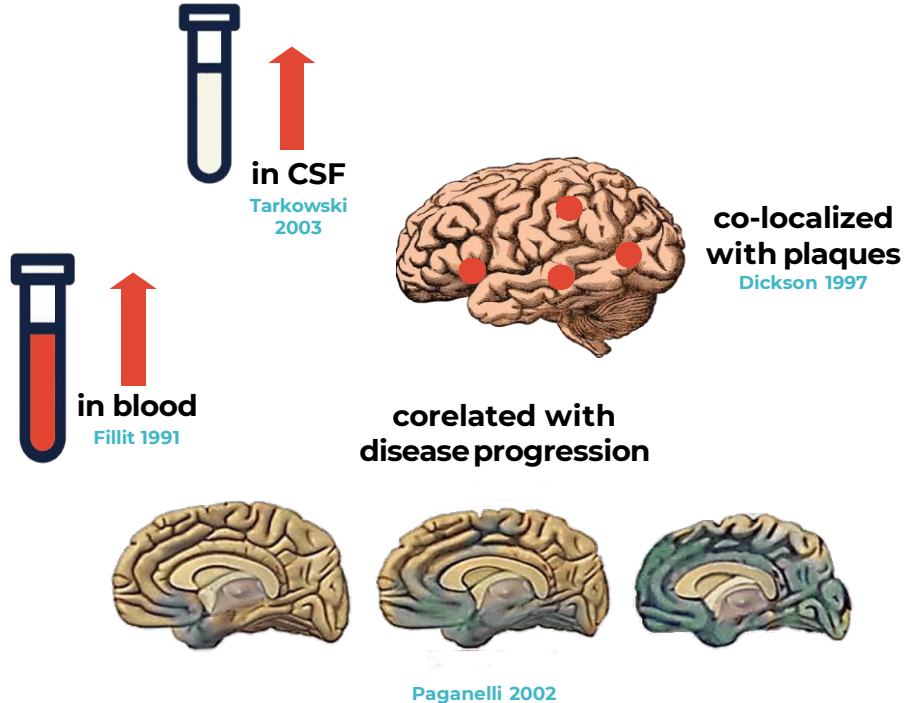
Adapted from PMID: 27470609, 33016914



TNF INCREASES EARLY IN LIFE CONTRIBUTING TO INFLAMMAGING and TNF LONG ASSOCIATED WITH AD AND PREDATES DEPOSITION OF AMYLOID



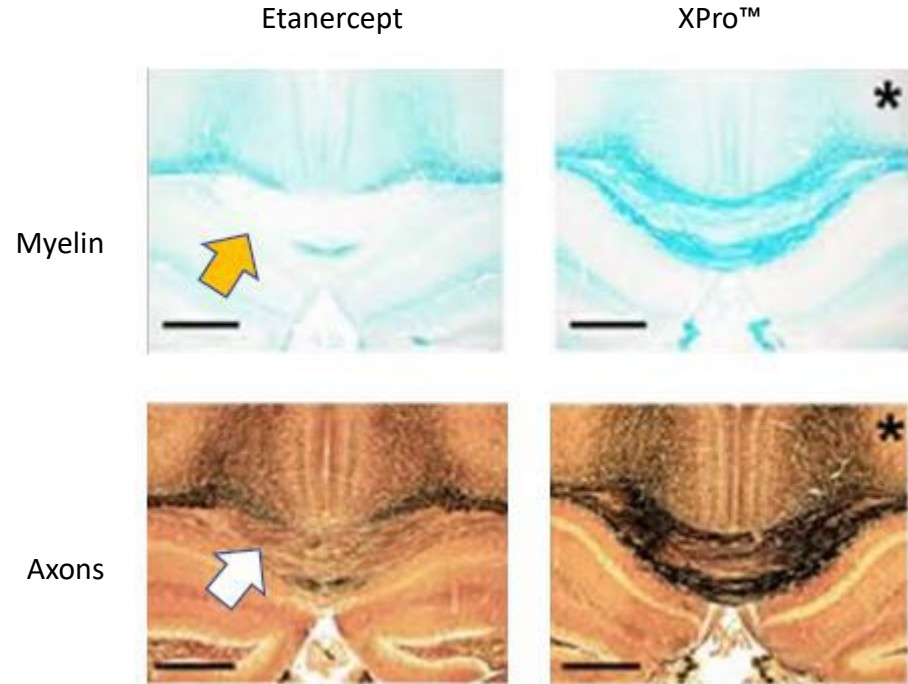
- Age is the most important risk factor for AD.
- Pro-inflammatory cytokines increase with age
- TNF is the master cytokine driving age related chronic inflammation – also known as *inflammaging*.





XPRO™ Safely Prevents Neuroinflammation without Axonal Degeneration and Demyelination

- Currently approved non-selective TNF inhibitors (eg: Etanercept) block both trans-membrane TNF and soluble TNF, leading to demyelination (yellow arrow) and axonal degeneration (white arrows).
- XPro™ selectively blocks soluble TNF, promoting remyelination and axonal regeneration.
- Currently approved non-selective TNF inhibitors have FDA warning against use in patients with neurologic disease.

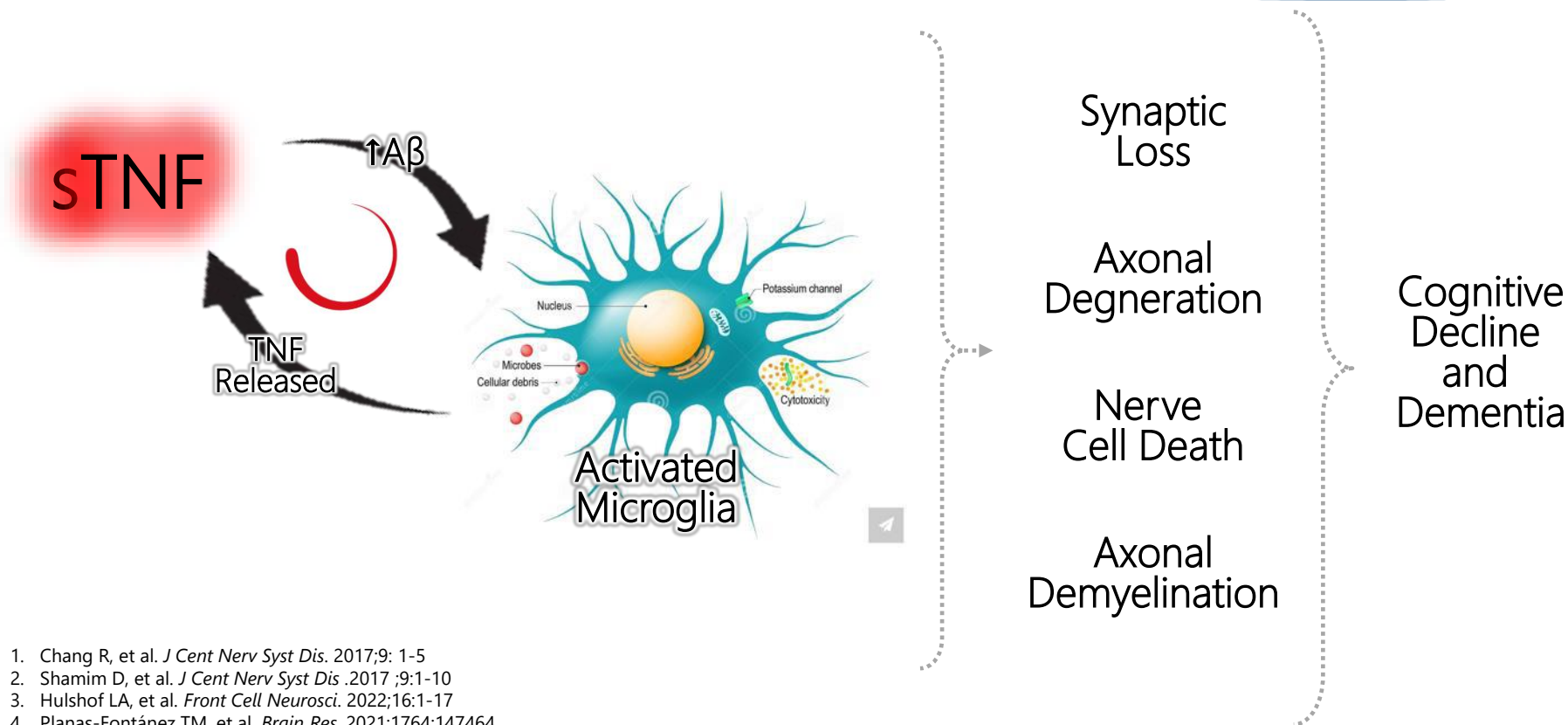


Karamita; Therapeutic inhibition of soluble brain TNF promotes remyelination by increasing myelin phagocytosis by microglia. <https://doi.org/10.1172/jci.insight.87455>



TNF Plays a Central Role in Neuroinflammation and AD

Pub MED: >1500 papers published on Neuroinflammation and AD



1. Chang R, et al. *J Cent Nerv Syst Dis*. 2017;9: 1-5
2. Shamim D, et al. *J Cent Nerv Syst Dis* .2017 ;9:1-10
3. Hulshof LA, et al. *Front Cell Neurosci*. 2022;16:1-17
4. Planas-Fontánez TM, et al. *Brain Res*. 2021;1764:147464
5. Marzan DE, et al. *Glia*. 202;69(6):1583–1604



PHASE 1B CLINICAL TRIAL DESIGN AND RESULTS

N=18 : 6 Patients per Cohort

Goals

Study Design

- Open label, three dose, 3-month study
 - 0.3 mg/kg
 - 0.6 mg/kg
 - 1.0 mg/kg
- XPro1595 administered via weekly Subcutaneous injections
- Biomarkers assessed at baseline and 3 months

Key Enrollment criteria

- AD Diagnosis

*Plus at least one of the **following inflammatory biomarkers:***

- C-reactive Protein >1.5 mg/mL
- Erythrocyte sedimentation rate > 10 mm/Hr
- Hemoglobin A1c > 6% DSST
- One APOE4 allele

Safety

Reduce Biomarkers of Neuroinflammation

Reduce Biomarkers of Neurodegeneration

Dose Identification

Confirm enrichment criteria identify patients with Neuroinflammation



Enrichment Criteria used to select patients with AD due to Neuroinflammation

Using simple biomarkers to match patient's disease with XPRO MOA

Peripheral Inflammation cause Central Inflammation

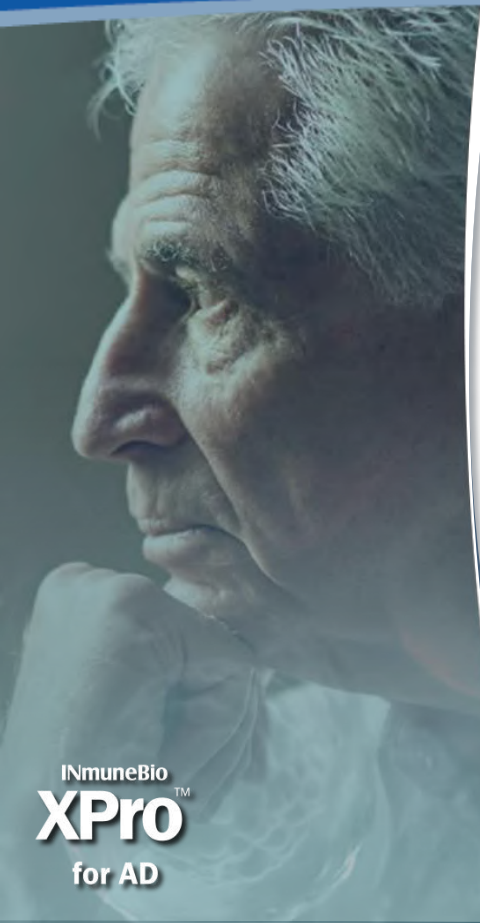
- Patients with elevated biomarkers of peripheral inflammation have increased risk of AD due to neuroinflammation
- ApoE4 carriers have higher risk of AD

Peripheral Disease	Enrichment Factor	Increased Risk of AD
Genetic	ApoE4	3
Peripheral inflammation	ESR	1.84
Cardiovascular disease	CRP	1.34
T2DM and Metabolic syndrome	HgbA1c	1.8



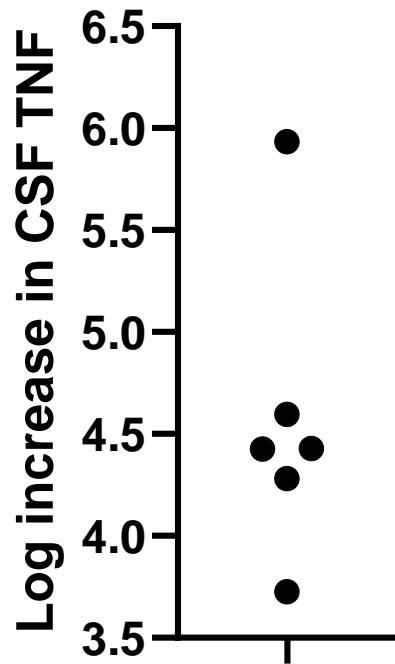
XPro Crosses the BBB to Neutralize sTNF in Brain

Phase I CSF from 1mg/kg patients



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for AD

- In OLINK assay, sTNF cross reacts with XPro
- CSF XPro level is a measure of CNS XPro level
- Methodology:
 - Baseline sTNF level at time 0
 - Repeat sTNF level after 12 weeks XPRO 1mg/kg/once a week (trough level)
 - Difference between time 0 and 12 weeks presented as log plot
- **Result:** XPro trough levels after 12 weeks of therapy at least 3.5 logs greater than baseline sTNF level
- **What does it mean?** 2 log excess of XPro is need to neutralize more than 99.9% of sTNF in the CNS
- **Conclusion:** 1mg/kg/QW XPro neutralizes >99.9% of CNS sTNF in humans

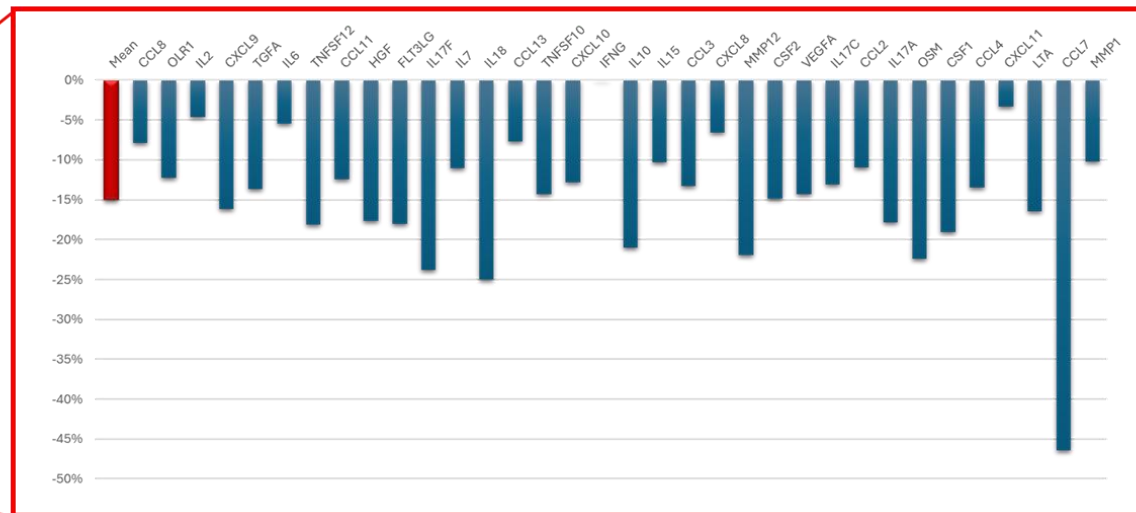
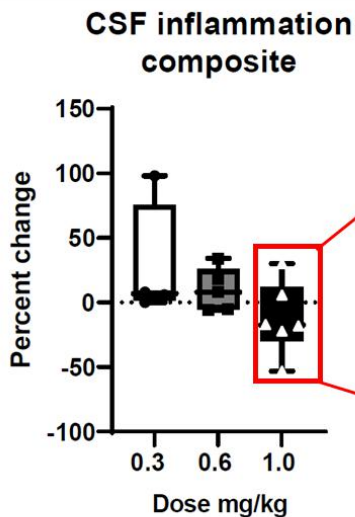




XPRO™ DECREASES NEUROINFLAMMATION IN AD Patients

Decreased Inflammatory Cytokines in CSF after 3 months at 1mg/kg/QW dose

CSF



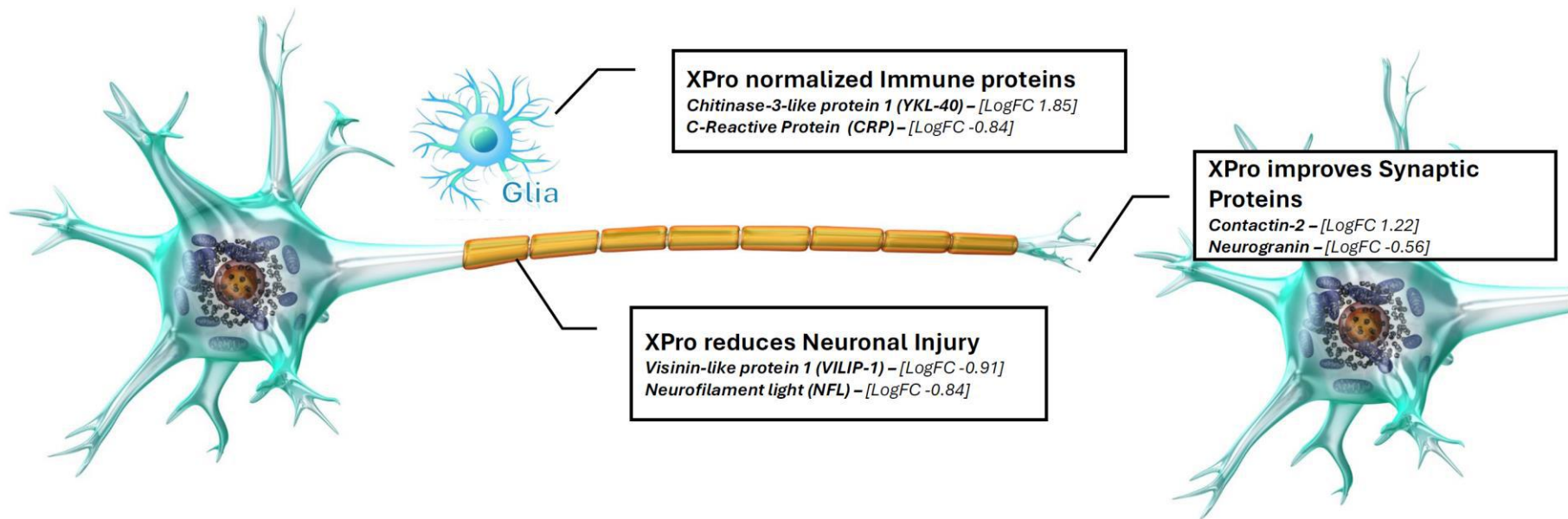
**1 mg/kg group (N=6)*



XPro™ has a Significant Effect on the Regulation of AD Related Biomarkers

Downstream Benefits of Decreasing Neuroinflammation

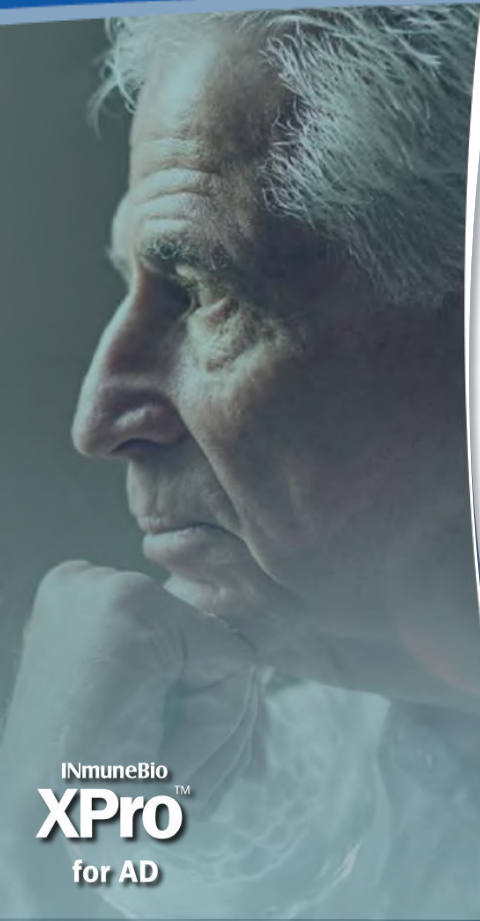
Significant Regulation of AD Relevant Neuroinflammatory, Neural Injury, and Synaptic Proteins





Functional Change in AD Patients after 4 weeks of XPro™

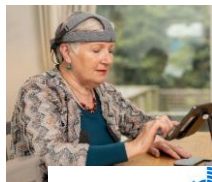
Pilot study of 7 moderate to severe AD Patients; 1 mg/kg once a week subQ



Resting alpha-band power in EEG is a broad measure of brain network connectivity, which is attenuated with the progression of Alzheimer's disease.

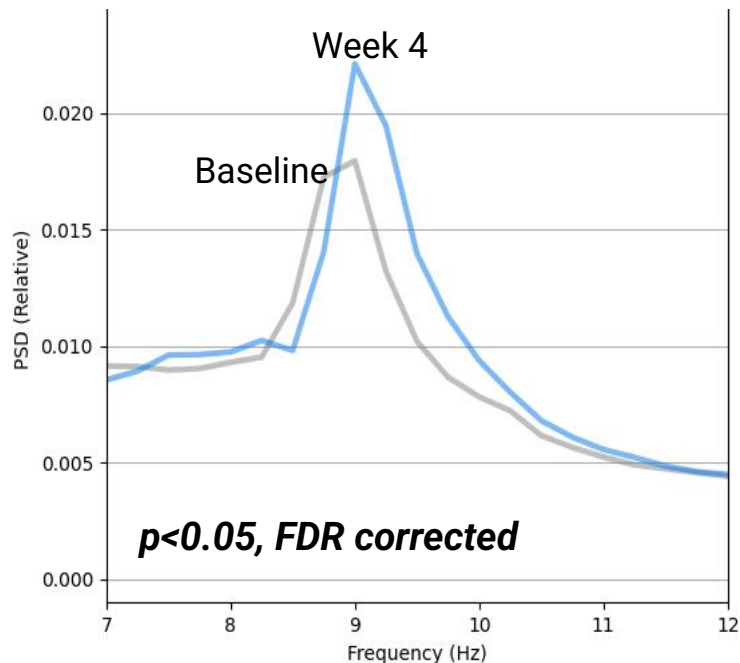
Group level increase in resting alpha power was observed over the 4-week intervention with XPro

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Cumulus

EEG Alpha Power after 4 weeks of XPro1595 treatment

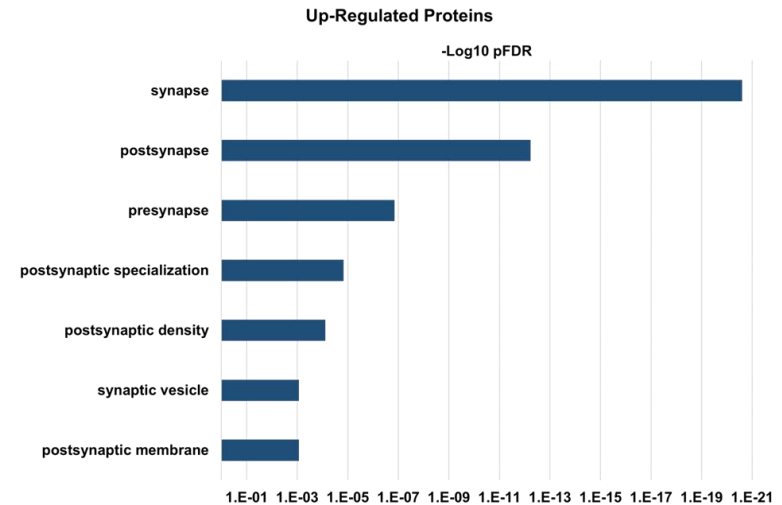
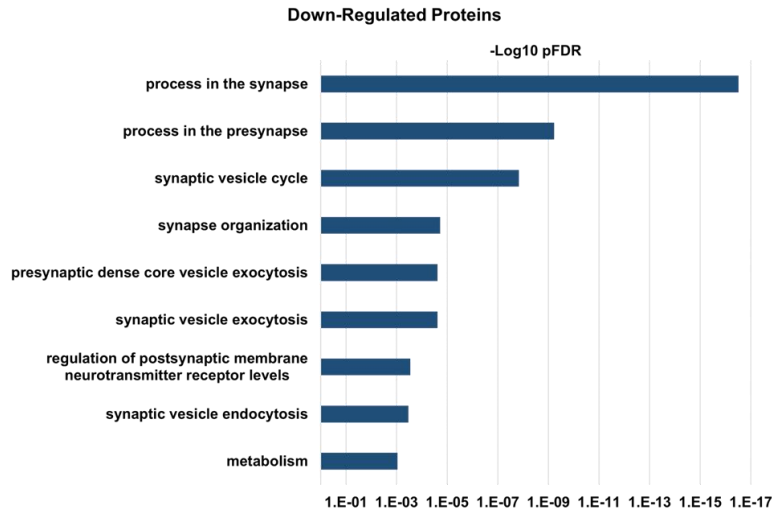




CSF proteome changes after XPro predicts EEG functional response

Phase I patients at 3 months 1mg/kg/QW

A comprehensive analysis of the CSF proteome affected by 3 months of XPro treatment for AD is in progress. Top-level results show a high concentration of synaptic proteins (24%) among the group with significant changes from baseline.

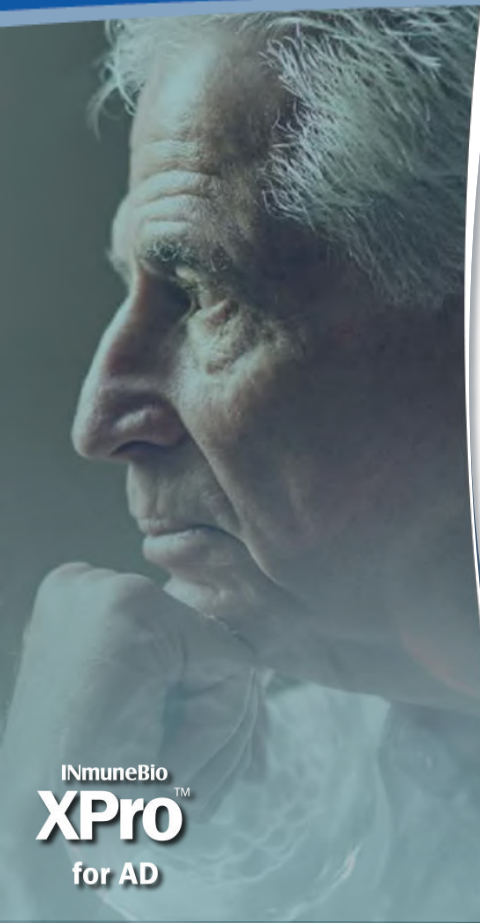


SynGO biological process enrichment for proteins in CSF differentially down-regulated by treatment with XPro1595 1.0 mg/kg/wk for AD

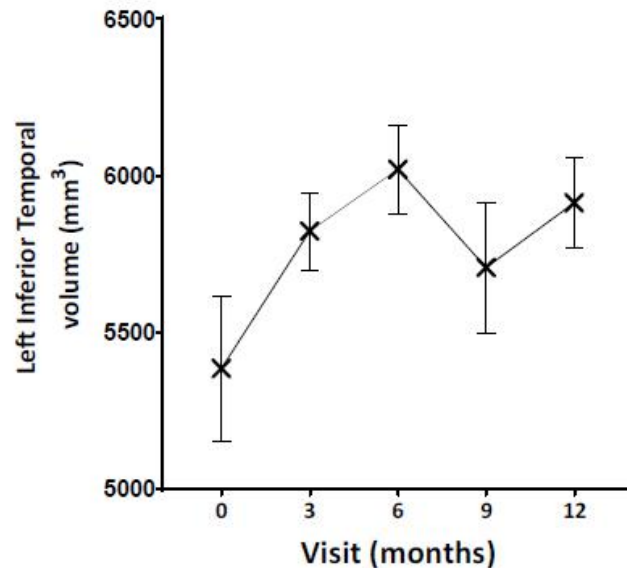
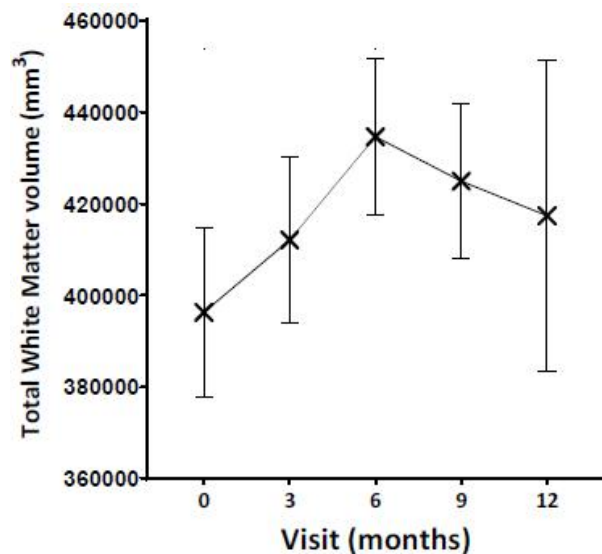
SynGO biological process enrichment for proteins in CSF differentially up-regulated by treatment with XPro1595 1.0 mg/kg/wk for AD



Structural Benefit: XPro™ Increased White Matter Volume



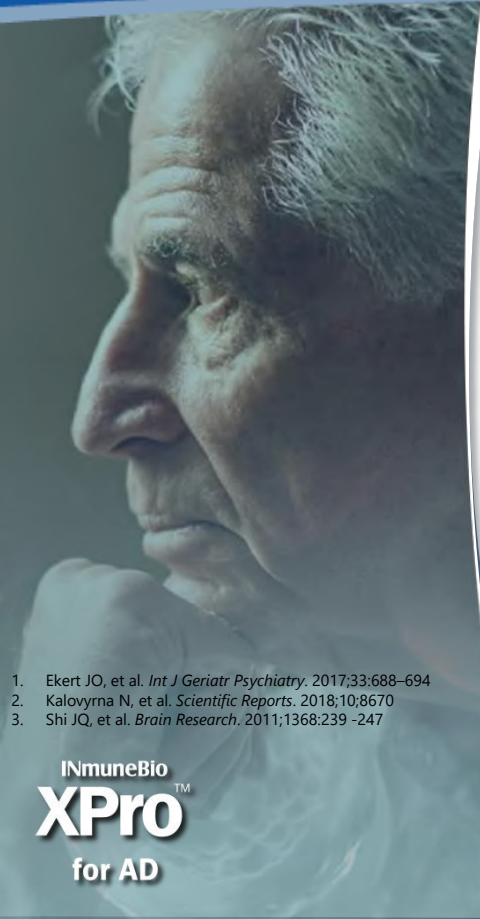
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for AD





XPro Attenuates AD-like Pathology and Restores Normal Function in Animal Models

Findings in Phase I studies precisely matched findings in animal studies



Immune Dysfunction

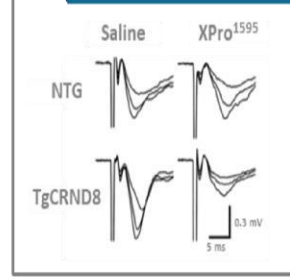
Amyloid Pathology

Synaptic Dysfunction

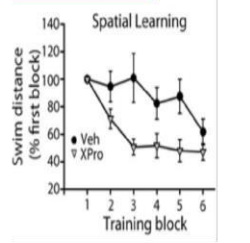
Nerve Cell Death

Cognitive Impairment

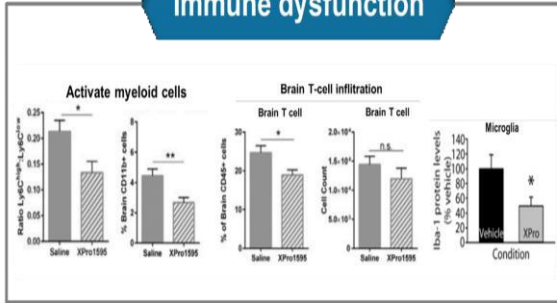
Synapse dysfunction



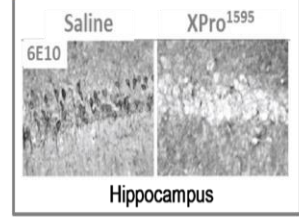
Cognitive Impairment



Immune dysfunction



Amyloid pathology



Efficacy has been shown in 3xTgAD, 5xFAD, TgCRND8 and aged mice 21

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1. Ekert JO, et al. *Int J Geriatr Psychiatry*. 2017;33:688–694
2. Kalovyra N, et al. *Scientific Reports*. 2018;10:8670
3. Shi JQ, et al. *Brain Research*. 2011;1368:239–247

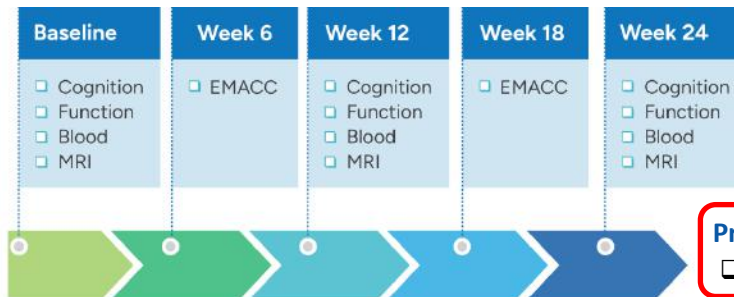
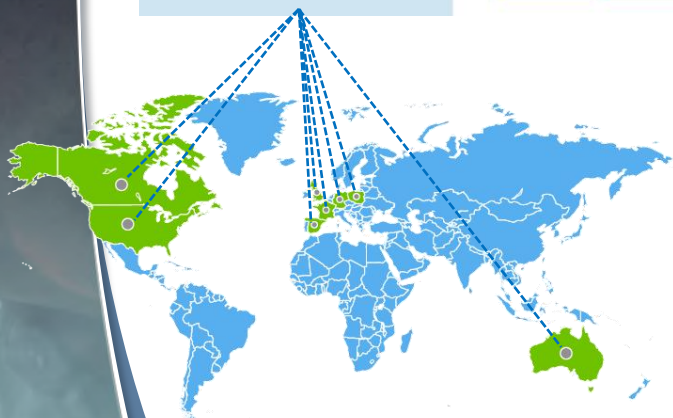


A 6 MONTH, RANDOMIZED, PLACEBO-CONTROLLED, DOUBLE-BLIND STUDY OF XPRO™ IN PATIENTS WITH EARLY ALZHEIMER'S DISEASE WITH BIOMARKERS OF INFLAMMATION



InmuneBio™
XPro
for AD

Key enrollment criterion	
<input type="checkbox"/> Early AD (50-85 yrs)	(N=201)
<input type="checkbox"/> Amyloid positive	
<input type="checkbox"/> CDR (0.5 or 1)	
<input type="checkbox"/> MMSE > 22	
One Inflammatory Biomarker:	
<input type="checkbox"/> hsCRP (1.5 mg/L)	
<input type="checkbox"/> ESR (10 mmg/hr)	
<input type="checkbox"/> HbA1c (6%)	
<input type="checkbox"/> APOE4+	



Primary Endpoint
 EMACC

Treatment

- 2:1 (XPro1595:Placebo)
- 1 mg/kg XPro1595 weekly subQ injection

Secondary Endpoints

- CDR, ECog
- ADL, NPI
- Blood
- MRI
- Safety

Unique design elements:

- small and short
- enrichment,
- precise cognitive end-point



EMACC: Early/ Mild Alzheimer's Cognitive Composite

Why use EMACC as our primary endpoint?

The EMACC provides an accurate cognitive assessment in patients with Early Alzheimer's Disease

Measure what matters!

- Traditional endpoints (CDR/ADAS-Cog) optimized for cognitive changes that occur in *moderate to severe* AD patients. These are not the same cognitive changes that occur during early AD.

Psychometrically “sound”

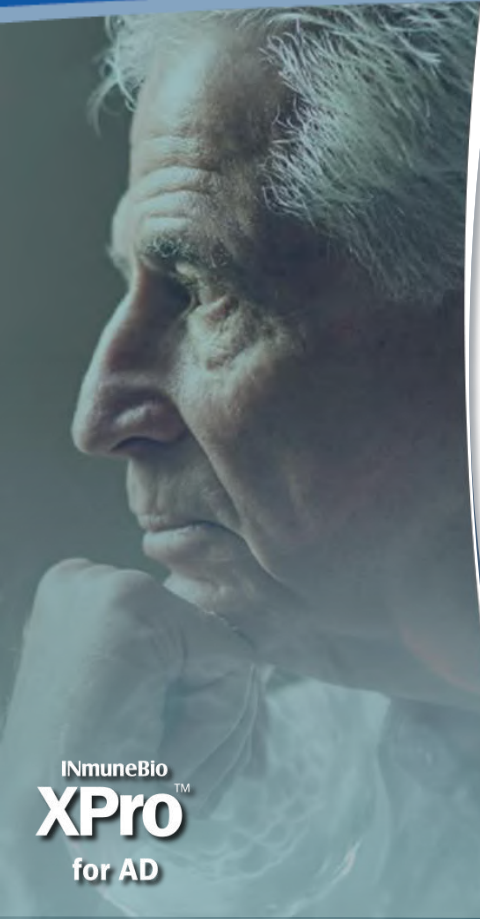
- EMACC was empirically derived by pharma to measure change in Early AD
- No floor or ceiling effects
- Lower variance and shorter retest intervals provides smoother measure of cognitive change

Why is this important?

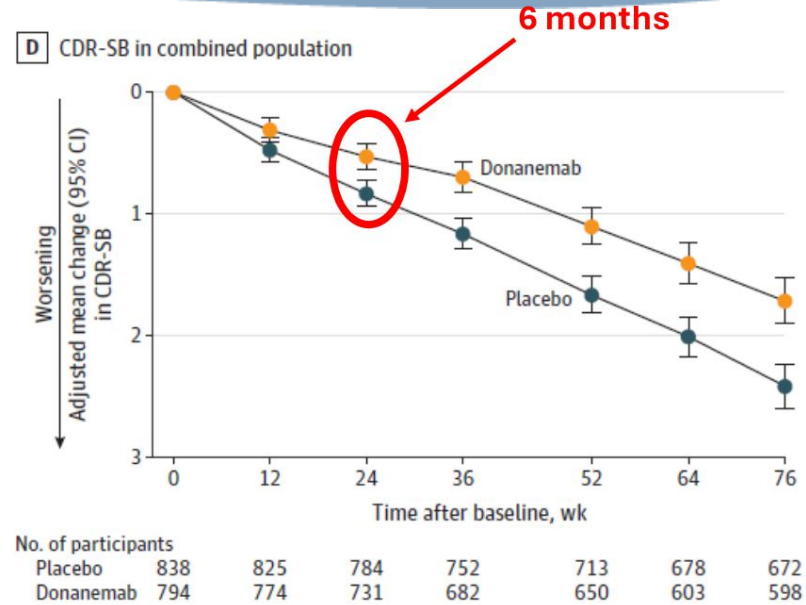
- Greater dynamic range allows measure of stable, worsening or improved cognition
- Allows for shorter and smaller clinical trials



XPro™ Phase II Trial uses Conservative Statistical Plan Based on CDR-SB



- Both lecanemab and donanemab Phase III statistically positive at 6 months
- Effects size of XPro™ at 6 months is “same” as anti-amyloid
- **Conclusion:** XPro™ needs to be as good as lecanemab or better for a positive study
- **Expectation:** XPro™ should be better than lecanemab and donanemab at 6 months

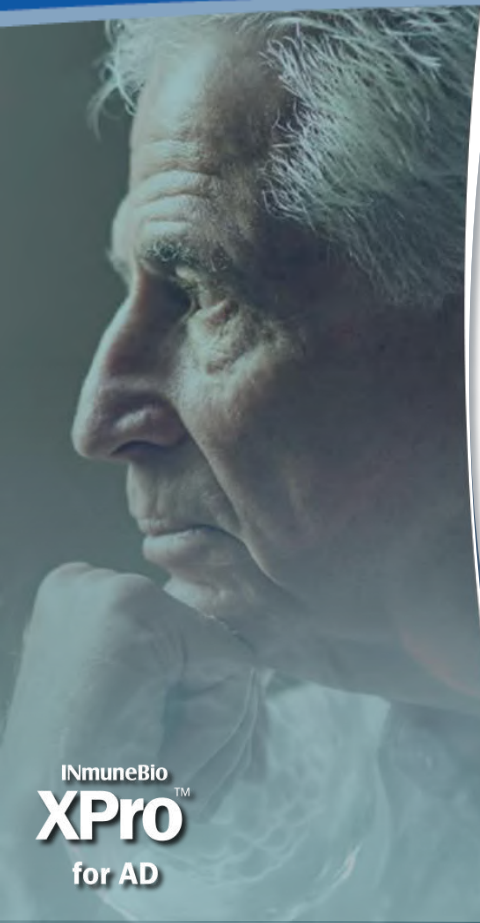


	Placebo/Drug CDR difference	6 m CDR Effect size
Lecanemab	0.24	0.30
Donanemab	0.30	0.30
XPRO (est)	0.22	0.28



Summary: Phase 2 XPro™ for AD

ENROLLMENT TO COMPLETE MID 2024 WITH TOP LINE DATA APPROXIMATELY 6 MONTHS FROM LAST ENROLLMENT



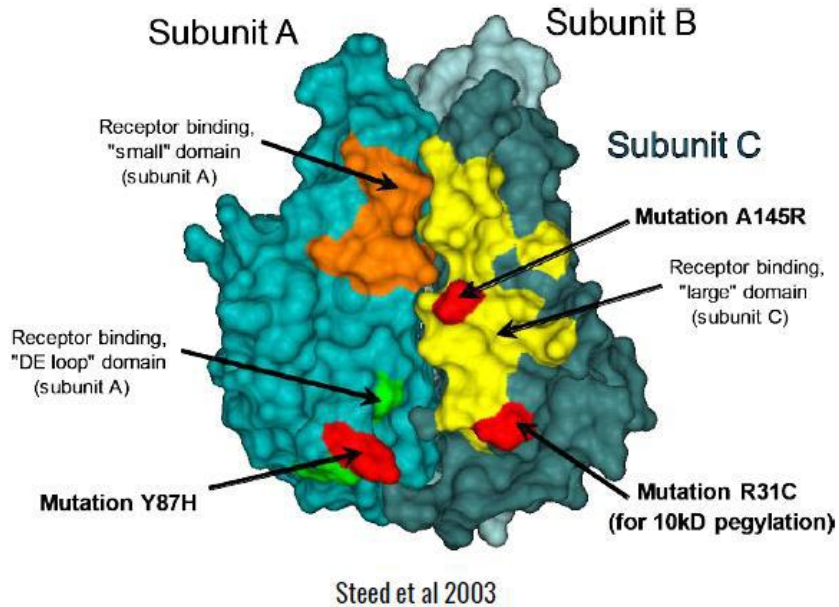
InmuneBio
XPro[™]
for AD

- **Enriching for patients that have AD with inflammation (ADi)**
 - ADi patients have faster progressing disease with less variance derisks clinical trial design
- **Cognitive and functional measures that are meaningful and relevant for Early AD patients**
 - EMACC has greater dynamic range to detect change in the appropriate cognitive symptoms
 - GAS allows us to assess cognitive functional change important to each patient.
- **Statistical plan equivalent to industry standard using CDR**
 - 6 month CDR end-point identical to lecanemab and donanemab Phase III trials
- **Biomarker packages confirms findings seen in pre-clinical studies**
 - Translational data suggest biologic changes should predict cognitive changes.



XPRO: A TNF INHIBITOR DESIGNED TO TREAT NEUROLOGIC DISEASE

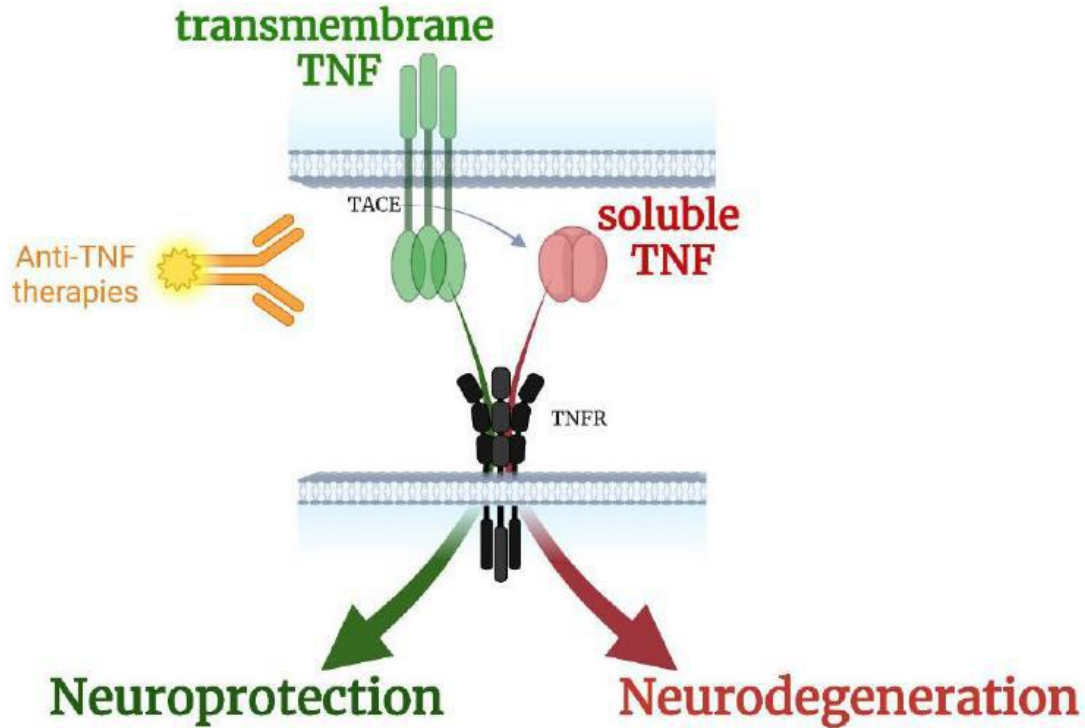
XPro1595: a selective inhibitor of ONLY soluble TNF



XPro1595 is identical to the human soluble TNF monomer with the exception of mutations in the receptor binding domain and another for pegylation.



TNF BIOLOGY IS COMPLICATED: TWO LIGANDS WITH OPPOSITE EFFECTS



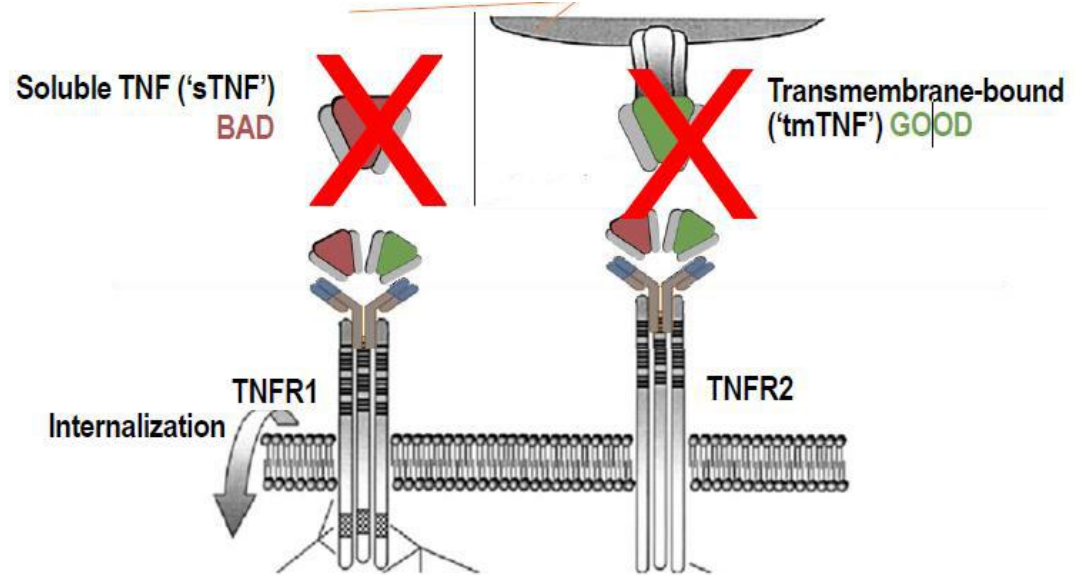


XPRO IS VERY DIFFERENT FROM CURRENTLY AVAILABLE DRUGS

Precise neutralization of the TNF ligand that drives disease

- **Soluble TNF (sTNF):** “bad” TNF that is known to cause acute and chronic inflammation and cell death
- **Transmembrane TNF (tmTNF):** “good” TNF improves the immune response, is neuroprotective and promotes remyelination

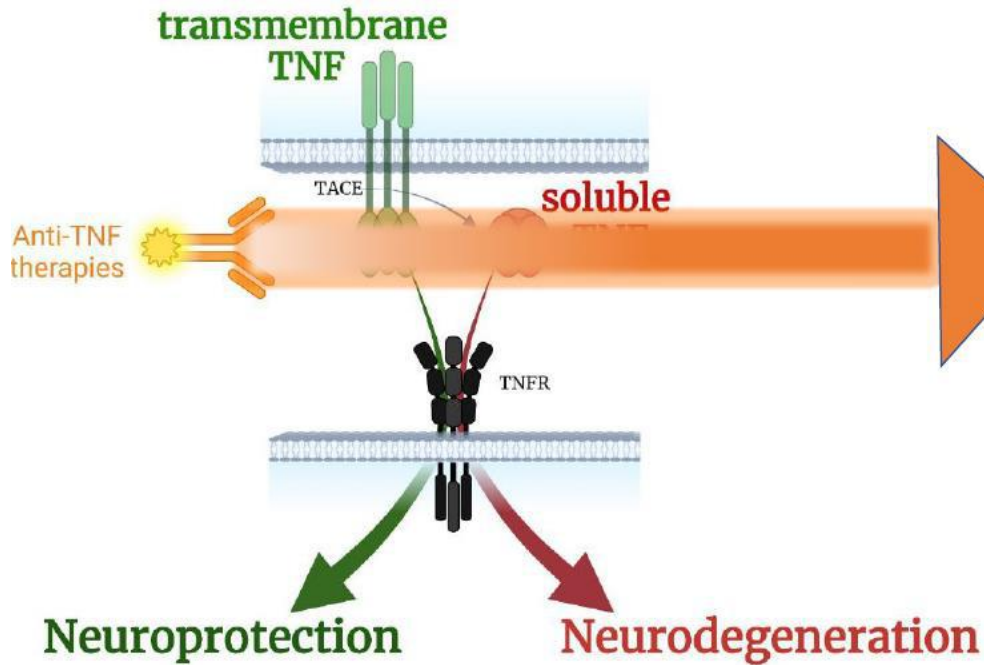
Approved TNF inhibitors block both cytokines



D. MacEwan et al, Cellular Signaling, 2002



SAFETY SIDE EFFECTS OF NON-SELECTIVE TNF BLOCKADE ARE ALL FROM BLOCKING TMTNF



Consequences of blocking tmTNF:

- Infection
- Cancer
- Demyelination

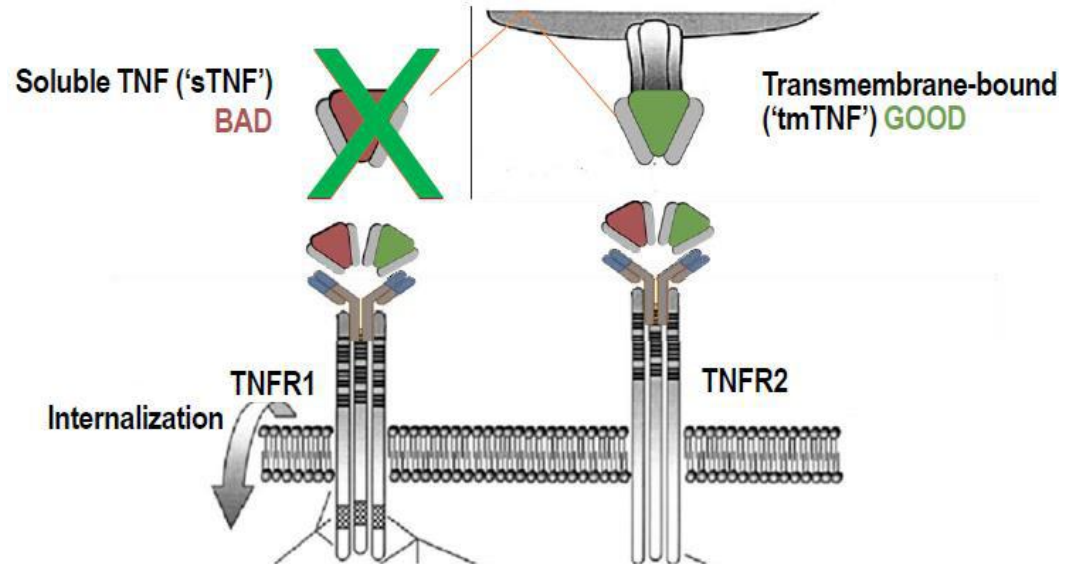


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- **Soluble TNF (sTNF):** “bad” TNF that is known to cause acute and chronic inflammation and cell death
- **Transmembrane TNF (tmTNF):** “good” TNF improves the immune response, is neuroprotective and promotes remyelination

XPro blocks soluble TNF



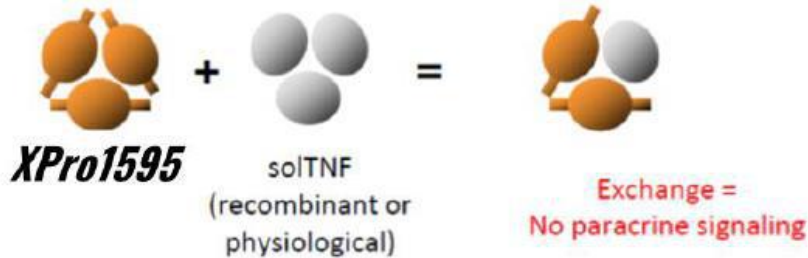
Adapted from MacEwan et al 2002



XPRO UNIQUE MECHANISM OF ACTION

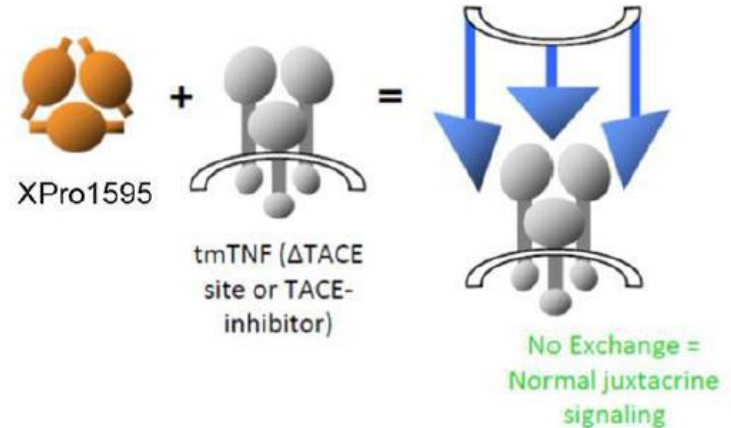
Xpro1595 freely exchanges with soluble TNF monomers to form inactive heterotrimers

Inflammatory soluble TNF eliminated:
No paracrine signaling through receptors



tmTNF homotrimers are anchored to the cell membrane, XPro1595 cannot exchange

Immuno protective transmembrane TNF unaffected: Allow juxtacrine cell-cell signaling

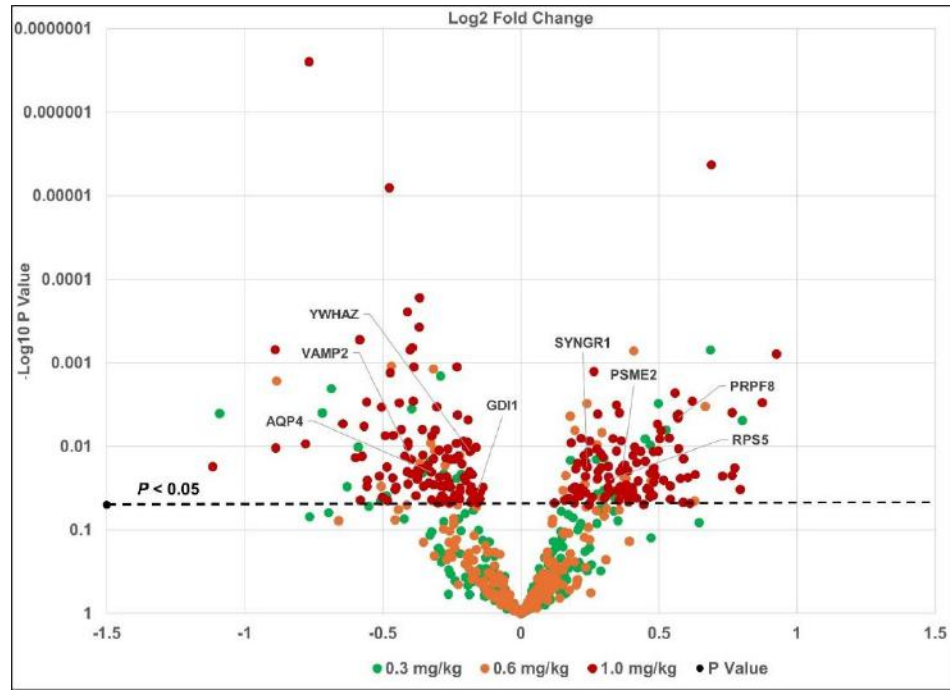




CSF Proteome Dose Response Phase I AD

Confirms CSF inflammatory cytokine dose response that 1mg/kg/QW is optimal dose

- Unbiased analysis of CSF proteome using Proteome Sciences TMT Calibrator technology
- 35,443 distinct peptide sequences associated with 4,966 protein groups were quantified and statistically evaluated
- **Conclusion:** Markers of microglial activation, synaptic and axonal dysfunction were significantly regulated in CSF from AD patients treated with XPro1595.



InmuneBio
XPro
for AD

INmuneBio

INKmune™ for Oncology

Off-the-Shelf NK Therapy Converts Patient's Resting NK cells
into Cancer Killing memory like NK cells



INKMUNE NK CELL PRIMING PROGRAM IN CANCER

INmuneBio
INKmune™
for Oncology

- Novel technology with strong patent protection
- Off-the-shelf program with scalable manufacturing
- Focus on solid tumors
- Timeline:
 - Select patient level data 2H24
 - Phase II data 2H25

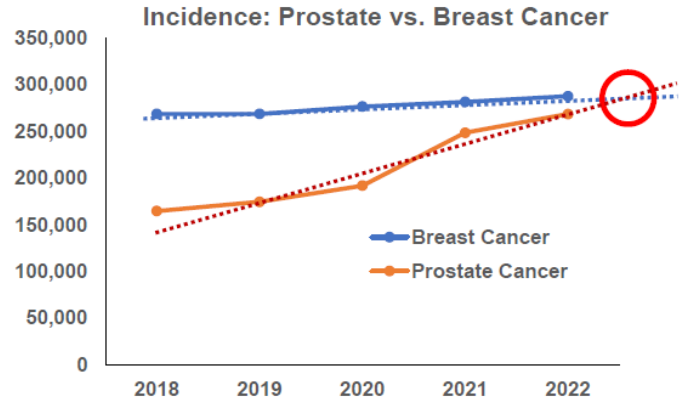


PROSTATE CANCER INCIDENCE AND MORTALITY

INImmuneBio

INKmune™
for Oncology

Prostate Cancer	2018	2019	2020	2021	2022
Incidence	164,690	174,650	191,930	248,530	268,490
Mortality	29,430	31,620	33,330	34,130	34,500





MONTHLY MEDIAN OS BENEFIT OF DRUGS APPROVED FOR MCRPC

INmedBio

INKmune™
for Oncology

Agent	Sipuleucel-T	Abiraterone	Enzalutamide
Median OS benefit (Months)	4.1	Post-doc: 4.6 Pre-doc: 4.0	Post-doc: 4.8 Pre-doc: 4.0

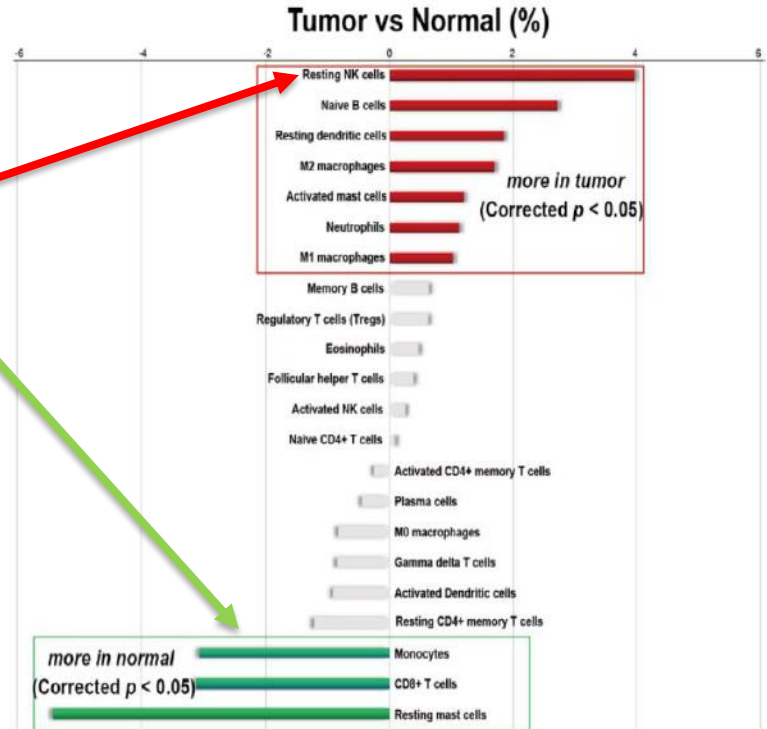
Docetaxel	Cabazitaxel	Radium-223	PSMA RLT	Olaparib
2.4	2.4	3.6	5.3	2.3



INKmune™ to Activate Resting NK Cells in mCRPC

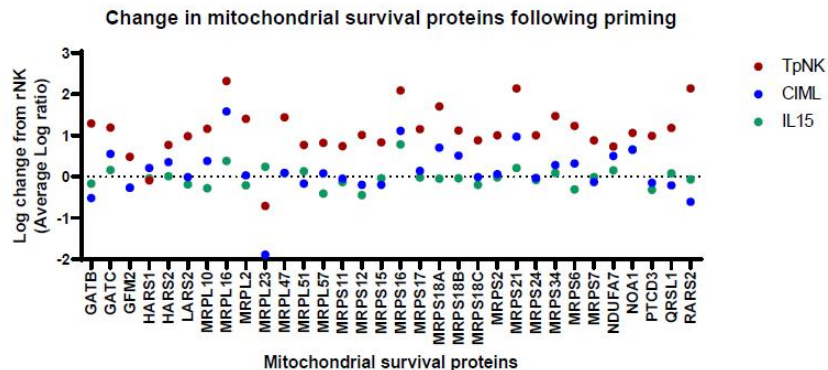
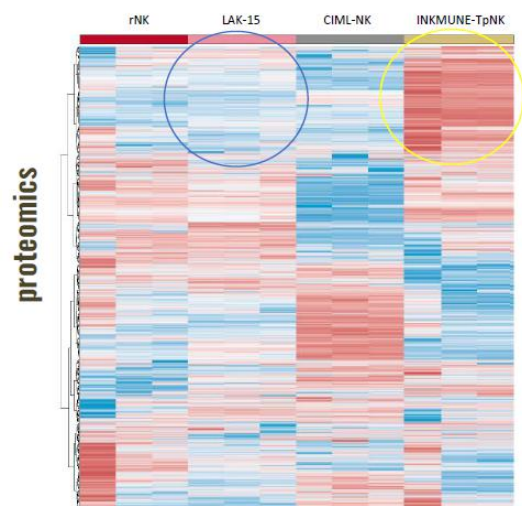
INmuneBio
INKmune™
for Oncology

- Prostate cancer immune infiltrate cells are resting NK cells *not* T cells
- Is lack of T cell infiltrate why PDL1 and TIGIT fail in mCRPC?
- NK cells in mCRPC are resting NK cells that do not kill tumor
- INKmune goal: convert resting NK cells to cancer killing memory like NK cells

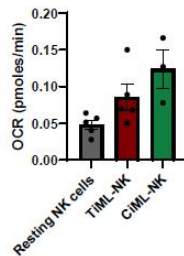




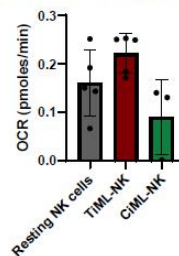
INKmune induces a unique NK cell that survives in a hostile TME to kill tumor cells



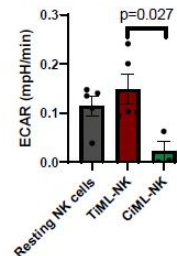
Basal Mitochondria Respiration



Maximal Mitochondria Respiration



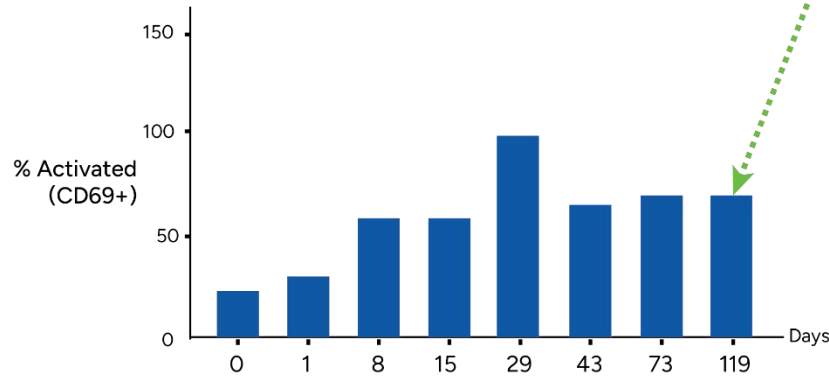
Spare respiratory capacity



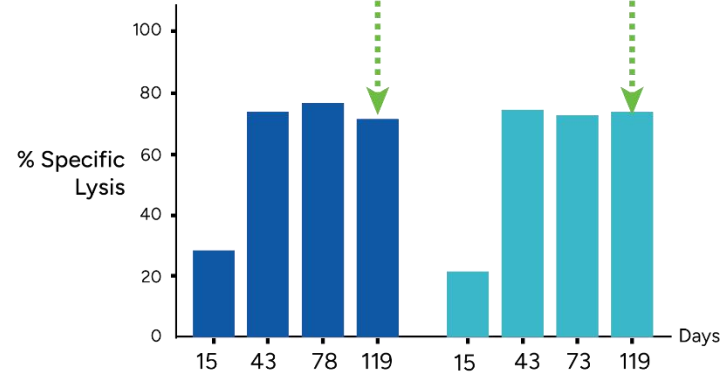


INKMUNE™ PHASE 1 HUMAN RESULTS

Persistence of activated tumor-killing memory-like NK cells in blood at 119 days



INKMUNE activated tumor- killing NKG2D+ NK Cells



PB NK + K562
NK - sensitive

PB NK + Raji
NK - resistant

Safe and well-tolerated as an out-patient
Controls disease with excellent QOL



CaRe PC – a modified Bayesian design Phase I/II trial testing multiple doses of INKmune in men with mCRPC

Step 1 - 3X3 dose escalation “run-in” to demonstrate

- **Short-term safety** (28 days)
- short-term **immunologic efficacy**

Step 2 - simultaneous testing of multiple doses to

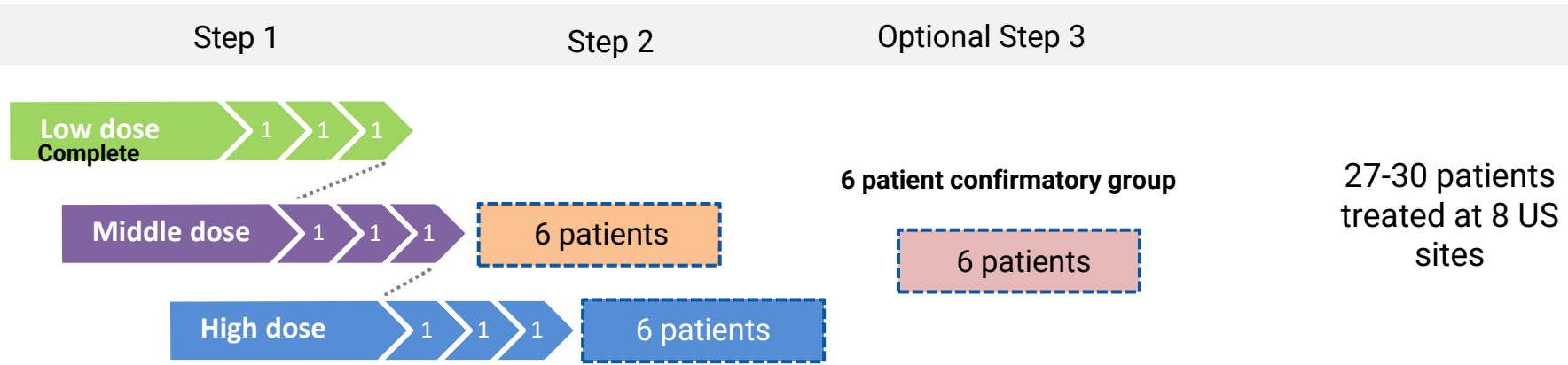
- Demonstrate **long-term safety** (6 month)
- Demonstrate **proof-of-biology** (POB = anti-tumor effects)
- POB “efficacy” measures - PSA, ctDNA and PSMA PET
- Quantify **long-term immunologic efficacy** - persistence

Desired Outcome - clear safety and POB to support dose selection and investment decision for blinded randomized trial

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for AD



INKmune mBION12 mCRPC



- ✓ Inclusion criteria: mCRPC without contraindications or recent chemo or immunotherapy
- ✓ Inclusion criteria: mCRPC without contraindications or recent chemo or immunotherapy
- ✓ Definition of effective dose
 - Safe
 - Evidence of anti-tumor effects
 - Manufacturing efficiency

Definitions:

- Short and long-term safety – no drug related SAE
- Short-term immunologic efficacy – converts patient's NK cells to mINK cells that kill tumor cells (ex vivo assay)
- Long-term immunologic efficacy – persistence of mINK cells in patient's circulation
- Anti-tumor effects – evidence of control of tumor burden by PSA, PSMA and/or ctDNA



Appendix

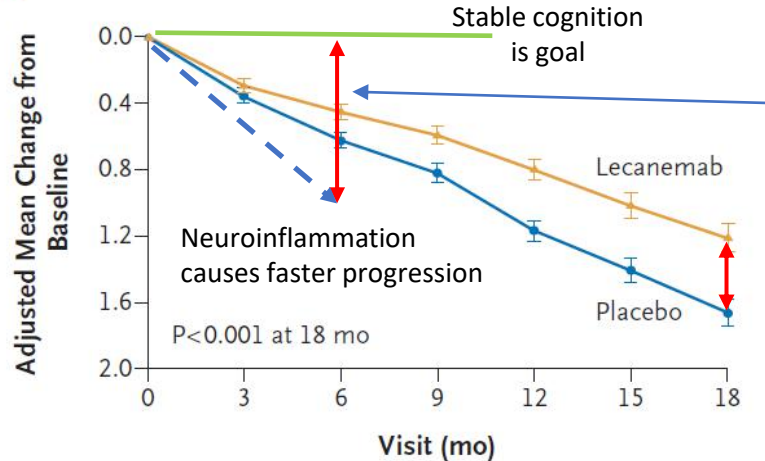


STATISTICAL POWER: WHY XPRO CLINICAL TRIALS ARE SHORT AND SMALL

- Enrichment strategy selects patients with neuroinflammation
- Patients with neuroinflammation have faster cognitive decline with lower variance than patients without neuroinflammation resulting in steeper decline of placebo group
- The goal of XPRO therapy in AD is to PREVENT cognitive decline not SLOW cognitive decline

Worsening

CDR-SB Lecanemab Phase III trial (C. van Dyck, et al, 2023 NEJM)

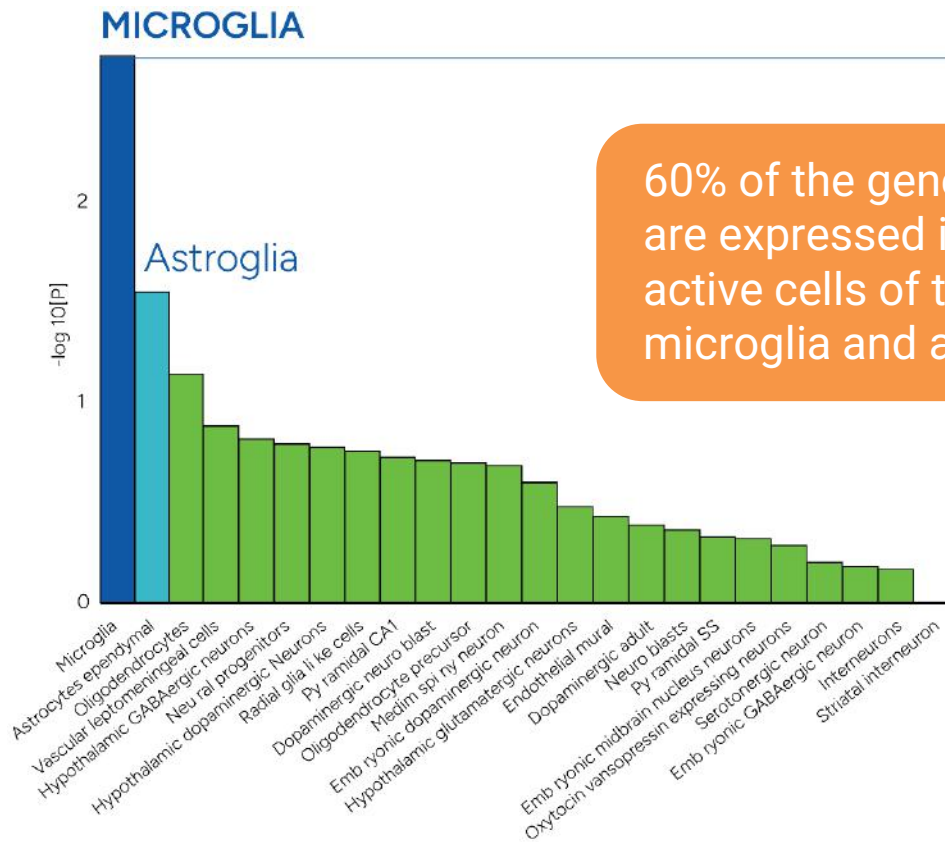


Large delta between treatment placebo increases statistical power



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XPro
for AD

Large Genetic Profile Study Of AD Patients Demonstrated Strong Association With Immune Dysfunction



60% of the genes up-regulated in AD are expressed in immunologically active cells of the brain including microglia and astroglia

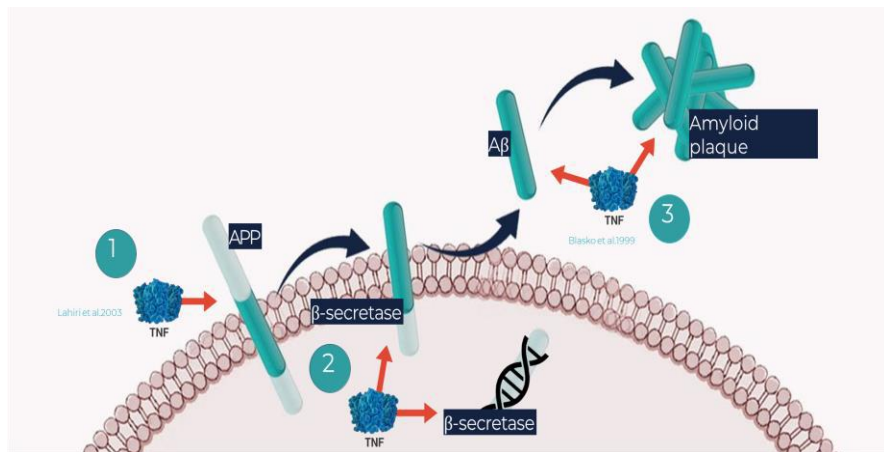
Genome-wide association study of 71,880 AD cases and 383,378 controls

Jansen IE, et al. *Nature Genetics*. 2019;51:404-413

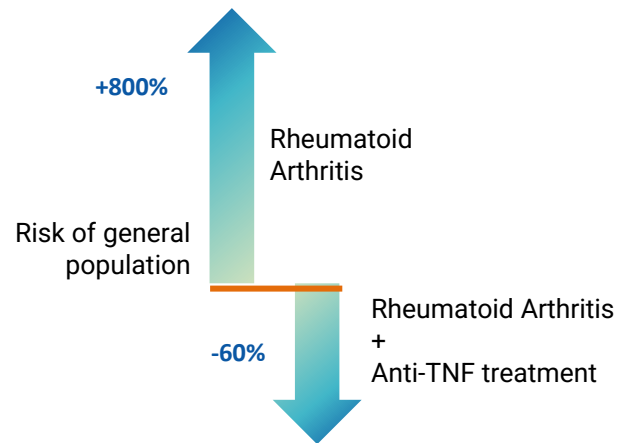


TNF Drives Amyloid Pathology and Risk of AD

- Neuroinflammation predates formation of amyloid
- TNF drives formation of amyloid plaque
- Chronic treatment with TNF inhibitors prevents AD



TNF inhibitors reduce risk of developing AD



Epidemiological Studies including a meta-analysis of more than 60 Million cases Linking **TNF Blocking Agents** to Reduced Risk of AD

Adapted from PMID: 27470609, 33016914

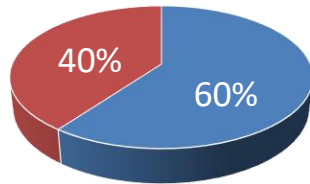


ImmuneRio
XPro™
for AD

Total Addressable Market: XPro™ in AD

- ✓ Early AD = MCI + mild AD
- ✓ > 40% of Early AD patients have neuroinflammation
- ✓ XPro Total Addressable Market in US = 4.3M
- ✓ XPro estimated market opportunity exceeds \$50B

AD patients with neuroinflammation



- AD without inflammation
- XPRO eligible - AD with neuroinflammation

29% had dysregulated immune function Nature Aging 2024
<https://doi.org/10.1038/s43587-023-00550-7>

Total Addressable Market: US XPRO for AD

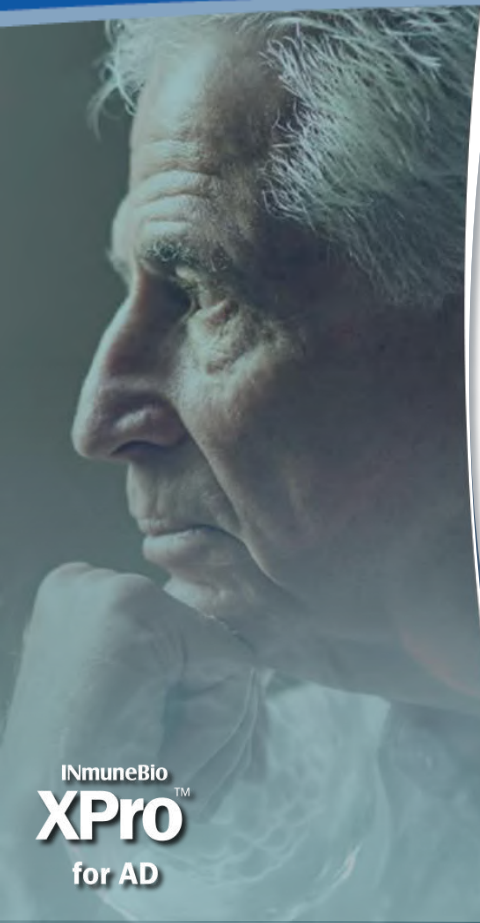
MCI patients -US	7M
Total AD patients – US*	6.7M
mild AD patients -US (50%)	3.8M
Early AD patients -US (3.8+7)	10.8M
XPRO eligible - US (40%)	4.3M
TAM value per \$10,000	\$43B

Sample calculations: \$10K annual cost = TAM of \$39B
\$40K annual cost = TAM of \$172B

*<https://www.alz.org/alzheimers-dementia/facts-figures>







CLINICAL BENEFIT IN PHASE I TRIAL: stable disease



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XProTM
for AD

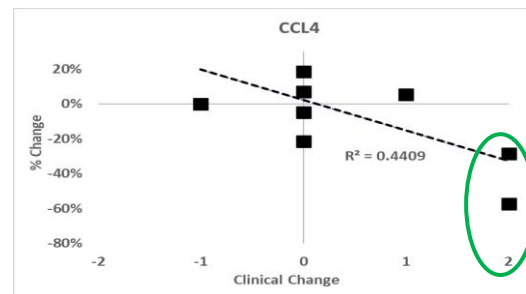
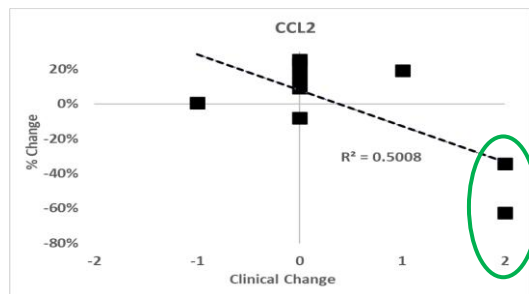
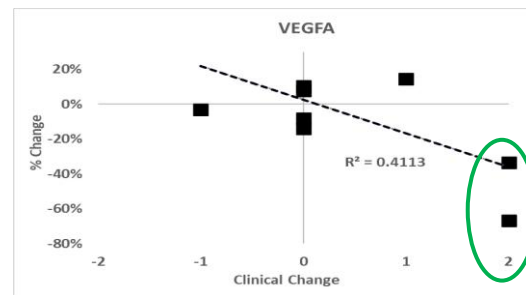
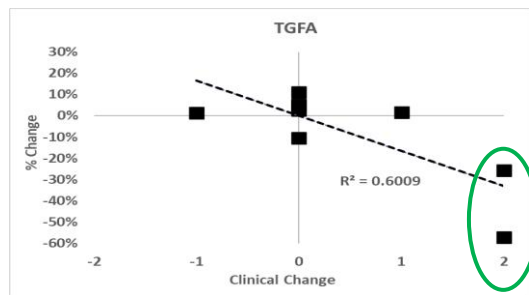
Disclaimer: small N, disease status heterogeneity, short time period

- Assessments administered:
 - ❖ Cognitive: MMSE, Verbal Fluency Test, Digit Symbol Coding
 - ❖ Neuropsychiatric Inventory
 - ❖ Bristol Activities of Daily Living Scale
- To compare across patients of different disease states, Dr. Judith Jaeger issued each patient a qualitative score of (-2, -1, 0, 1, 2) based on her assessment of the overall change over 3 months.

-2	-1	0	1	2
Meaningful progression	Minor progression	Stable Disease	Minor Improvement	Meaningful Improvement
				

Patients with the greatest improvement in cognition had the largest reduction in neuroinflammation

Correlation between decreased neuroinflammation and improved cognition



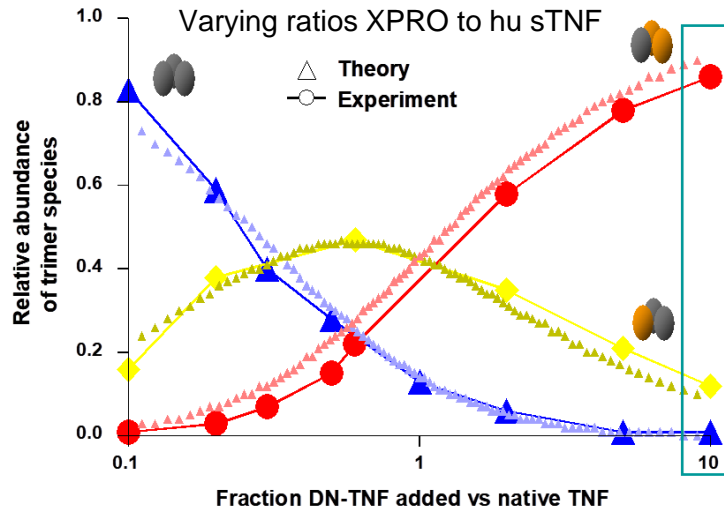
$R^2 = 0.4$ to 0.6
CSF cytokines by OLINK platform



1mg/kg/QW XPRO adequate dose to neutralize >99.99% sTNF in CNS

Phase I CSF from 1mg/kg patients

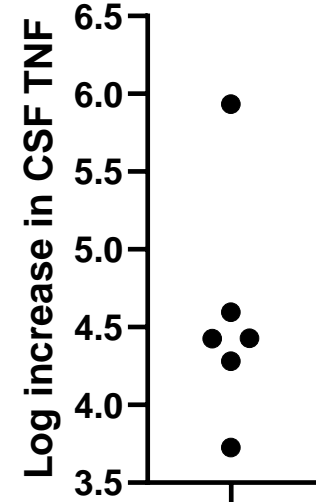
- Maximum dose determined by drug level at trough
- Trough level must be >2logs higher than CNS TNF level
- XPRO 1mg/kg/QW has trough levels that >3 logs CSF baseline sTNF
- **Conclusion:** All CNS sTNF neutralized with 1mg/kg/QW. Increasing dose of XPRO will not provide benefit



At equilibrium:

- DN-TNF = TNF:
- 2x DN-TNF > TNF:
- 5x DN-TNF > TNF:
- 10x DN-TNF > TNF:
- 100x DN-TNF > TNF:

XPRO level in CSF after 3 month therapy



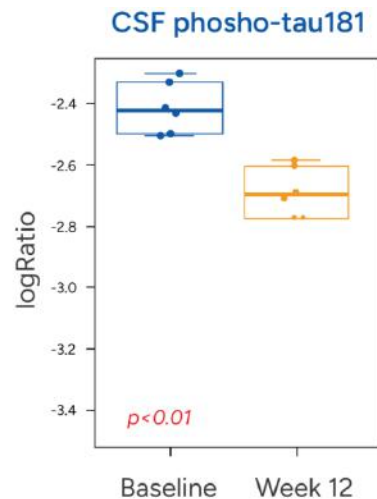
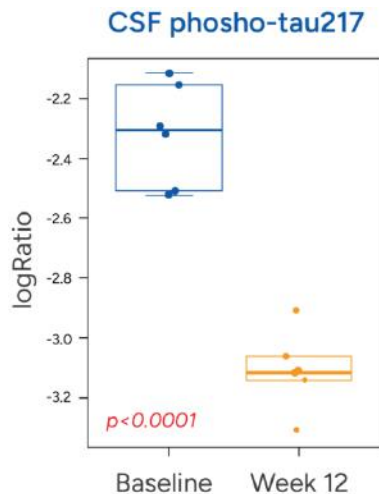
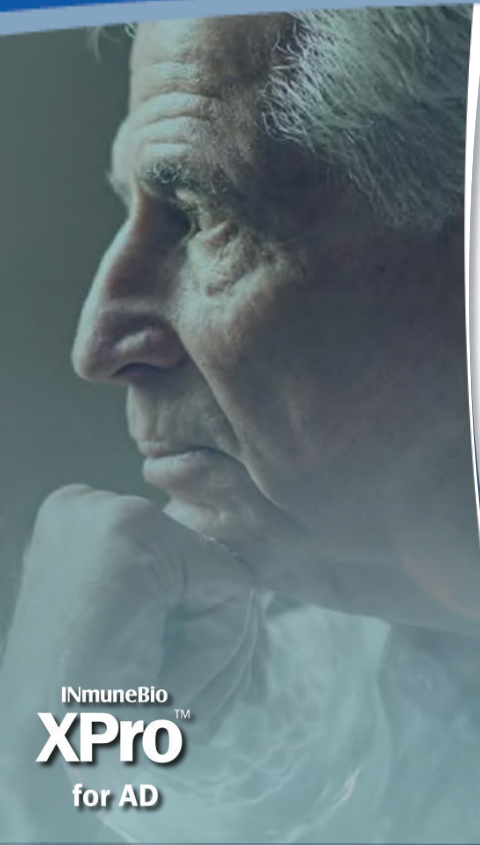
- Eliminates 75% TNF (1:3:3:1)
- Eliminates ~88.9% TNF
- Eliminates ~97.2% TNF
- Eliminates >99.2% TNF
- Eliminates >99.99% TNF



RESULT OF PHASE I TRIAL – p-tau217 as a sensitive and specific biomarker of AD

BIOMARKER OF NEURODEGENERATION IN AD – pTAU 217/181

CSF following 3 months of therapy with XPro™ (1 mg/kg)



INmuneBio
XPro™
for AD

Phospho-tau is a biomarker of neurodegeneration
Phospho-tau217 correlates best with cognitive dysfunction



XPro™ Improves EEG Alpha Power Following 4 Weeks of Treatment

EEG is a biomarker of brain function that can be used as a measure of target engagement

The study evaluated the feasibility of using a portable EEG device to collect quality EEG data when used by the patients at home. EEG was assessed in seven moderate to severe AD patients treated once weekly with 1 mg/kg (sc) of XPro1595 for 4 weeks.

The study demonstrated the feasibility of collecting EEG in advanced AD patients. A significant increase ($p < 0.05$) in resting alpha power was observed after 4-weeks of treatment with XPro1595

Resting alpha-band power in EEG is a broad measure of brain network connectivity. Reduced Alpha power is linked with cognitive decline and the progression of Alzheimer's Disease. Alpha waves are essential for internal functions like mental arithmetic, short-term and working memory, and visual-spatial mental imagery exercises. In individuals with AD, Alpha wave power is diminished due to the breakdown of brain networks associated with degeneration.



INTELLECTUAL PROPERTY SUITE

Patent Exclusivity



Ref. Biologic Exclusivity

DN-TNF PLATFORM

31 global patent properties

- Compositions
- Formulations
- Treatment Methods



Exclusive Patent Licenses

- Xencor
- Pitt

10 issued patents
21 pending apps

Patent Coverage
thru 2033*

**# years from Marketing Authorization, varies by jurisdiction:

- 12 years**
- 10 years**
- 5 years**
- 8 years**
- 8 years**
- 6 years**
- 6 years**

- US
- EP
- AU
- CA
- CN
- JP
- KR

NK PRIMING PLATFORM

10 global patent properties

- Compositions
- Formulations
- Treatment Methods



Exclusive Patent License

- Immune Ventures

5 issued patents
5 pending apps

Patent Coverage
thru 2036*

*current coverage.
Subject to patent term extension up to 5 years and/or issuance of follow on patents



MANAGEMENT TEAM

Broad biotechnology background including legal, intellectual property, drug manufacturing, clinical trial management, FDA approval, drug marketing, finance, business development and operations.



Raymond J. Tesi, MD
CEO/CMO & Chairman of the Board



David J. Moss
CFO



Mark W. Lowdell, PhD
CSO



Joshua S. Schoonover, Esq.
General Counsel



Tara Lehner
VP Clinical Operations



Christopher J Barnum, PhD
VP CNS Development