Inhibikase Therapeutics

3Q 2022 | BUSINESS PRESENTATION

Clinical Development of Disease-Modifying Therapeutics for Neurodegenerative Disease & Cancer

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Inhibikase Therapeutics

Innovative medicines across the therapeutic spectrum

- Novel therapeutics for multiple indications are developed from modeling human disease and discovering both the underlying science causing disease and how to translate that knowledge into new medicines.
- IkT's therapeutic approach for Parkinson's (PD) and related disorders treats the disease globally in the body. GI manifestation in many patients occurs at an early stage in PD, suggesting that evaluation of GI and brain function could be essential to identifying truly disease-modifying treatments for PD.
- Our lead asset in neurodegeneration is an inhibitor of the Abelson Tyrosine Kinase (c-Abl). IkT-148009 has been shown to halt and reverses functional loss in slowly progressive validated animal models.
- Innovation in treatment of cancer with alternate methods of drug delivery we believe will lead to safer kinase inhibitor medications. Our first product improves on standard-of-care treatments for certain leukemias.
- Our lead asset in leukemia, IkT-001Pro, is an inhibitor of BCR-Abl with an anticipated improved safety profile relative to standard of care imatinib mesylate and we intend to compete effectively in the generic marketplace.
- Multiple patent families for lead compounds with expiration of 2033 (leukemia) and 2036 (neurodegeneration) and beyond.
- $20.8 million in grants and contracts from NIH, DoD, the Michael J. Fox Foundation and the Georgia Research Alliance, all peer-reviewed; $63 million gross proceeds in investor capital in 2021
- Highly experienced and respected management team, consultants, Board of Directors and nearly all KOLs in the field on Scientific Advisory Board

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Multi-Indication Pipeline in Neurodegeneration, Oncology and Infectious Disease

				CLINICAL DEVELOPMENT[1]				BIOMARKER[3]		
DRUG TARGET	DRUG CANDIDATE	MODALITY	DISEASE INDICATION	PRECLINICAL DEVELOPMENT	PHASE 1/1B	PHASE 2	PHASE 3	PRECLINICAL TARGET ENGAGEMENT	CLINICAL TARGET ENGAGEMENT	CAN BE USED FOR PATIENT SELECTION
Neurodegeneration										Yes
c-Abl	**IkT-148009**	Small molecule	Parkinson's Disease: Treatment Naive							
c-Abl	**IkT-148009**	Small molecule	Parkinson's Disease: Early Stage					Validated	Validating	Yes
c-Abl	**IkT-148009**	Small molecule	Neurogenic Constipation					Validated	Validating	Yes
c-Abl	**IkT-148009**	Small molecule	Dysphagia					Validated	Validating	Yes
c-Abl	**IkT-148009**	Small molecule	Multiple System Atrophy					Validated	Validating	Yes
Oncology										
BCR-Abl	**IkT-001Pro**	Small molecule	Stable-phase CML (orphan indication)					Validated	Validated	Yes
Research Phase										
c-Abl	**IkT-148x**	Small molecule	Dementia with Lewy Body					Validated	Validating	Unknown
c-Abl	**IkT-148x**	Small molecule	Multiple System Atrophy					Validated	Validating	Unknown
c-Abl	**IkT-1427**	Small molecule	Progressive multifocal leukoencephalopathy					Validated	Validating	Yes

4 Indications Pursued Through 2 INDs. Shares Same Phase 1[2]

IMPD/CTAs to be filed in EU, IND to be filed FDA,2022. Shares Same Phase 1[2]

505(b)(2) Path to Market

(1). 'Clinical Development' progress bars represent the current state of the indicated programs. Blue arrows represent completed or in progress studies; white arrows represent planned approaches for future clinical studies.

(2). Four indications will be pursued for IkT-148009 in PD, which will be pursued through two INDs, one focused on treatment in the brain in treatment naïve or early-stage patients and the second focused on GI complications. MSA is a Parkinson's-like disease to enter clinical development at Phase 2 sharing the Phase 1 data for 148009 with PD. MSA moves forward in clinic ONLY if animal model study ongoing is positive.

(3). For biomarker status, 'Validated' refers to proof of target engagement in the target tissue which has been performed using rodent tissues and fluids. We are currently developing methods for using clinical samples for validating our ability to confirm target engagement in patients. 'Validating' in this context indicates ongoing efforts to prove target engagement using proprietary sources and methods under development from human tissues and fluids. Target engagement measures if and to what extent a compound occupies its target. 'Can be used for patient selection' refers to our ability to use one or more markers we are currently 'Validating' to screen patients for the presence of that marker as a means of defining the patients most likely to benefit from the proposed treatment.

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Parkinson's Disease Market & Strategy

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Parkinson's Disease in the U.S.[1] Large Market, Opportunity For Disease Modification

Chronic Disease for a Long Time

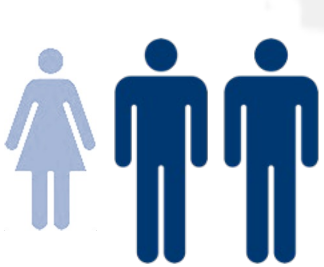
1/3 of a Patient's Lifespan = 25 years

60,000
New Cases / Year

38,000
Deaths / Year

700,000 – 1,000,000
U.S. Patients

60
Average Age Of Onset



Men twice as likely as **women** to contract disease

Other illnesses complicate development

47%
Arthritis

36%
Heart/Circulatory

35%
Psychosis

30%
Dementia

By 2025, parkinson's disease drug sales are expected to

DOUBLE

Pharma Insights, 2019

Sales estimates by 2025 are expected to crest

$6.0 BILLION

Pharma Insights, 2019

The country with the highest diagnosed prevalence is

THE U.S.

DelveInsight, 2019

[1]Parkinson's Disease Foundation Decisions Resources 2016, ParkinsonismRelatDisord . 2012;18:1073-1078, Neuroepidemiology 2010;34:143–151 , J Neurol Neurosurg Psychiatry. 1997 Jan;62(1):10-5.

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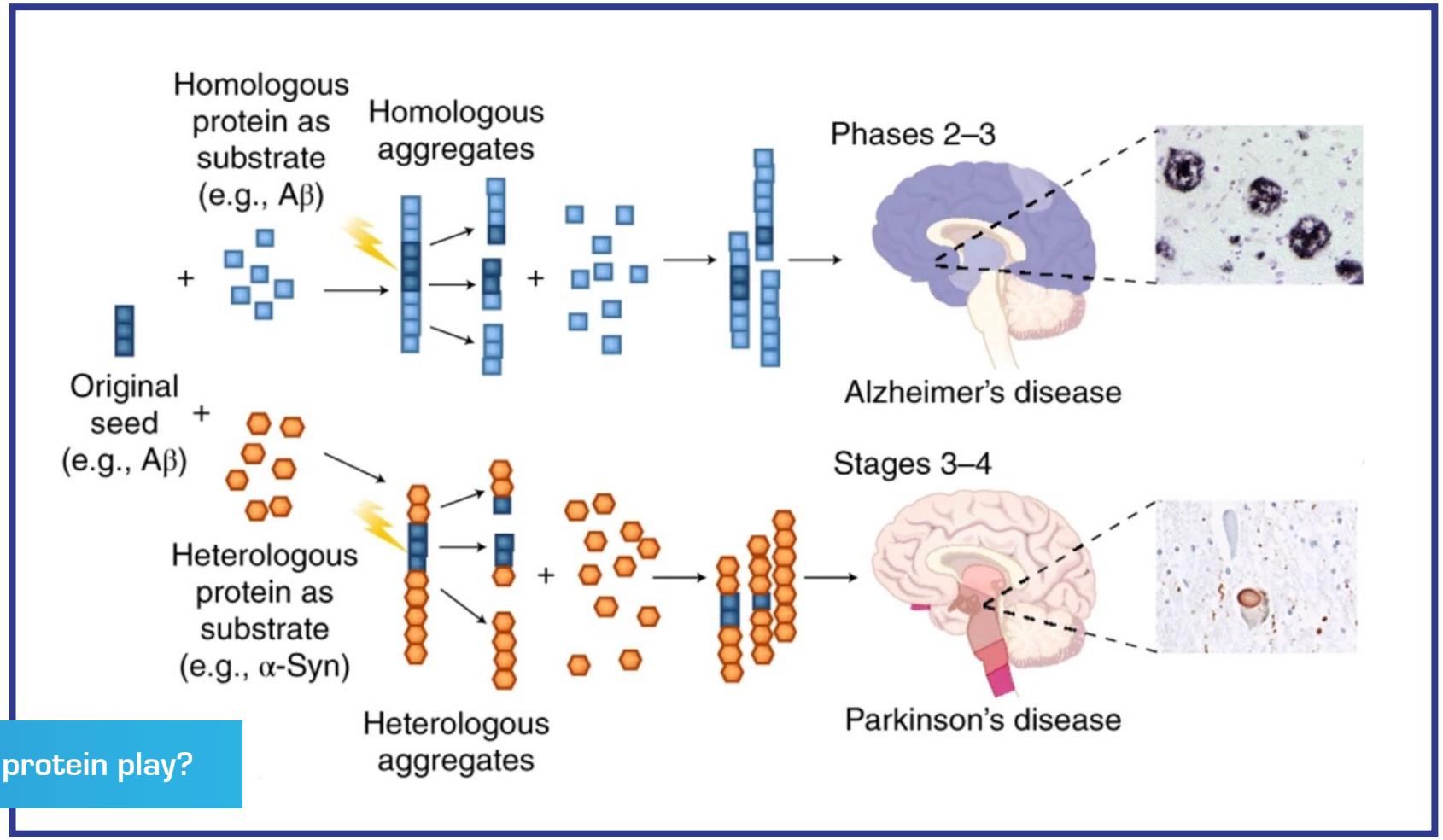
Causation in Parkinson's and Alzheimer's is closely related[1]



What role does the misfolded protein play?

[1]Nat. Neurosci. 21: 1332-1340 (2018)

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Evaluation of the Misfolded Protein ‘Seed’ in Parkinson’s Reveals c-Abl as the Primary Culprit

Play Video >

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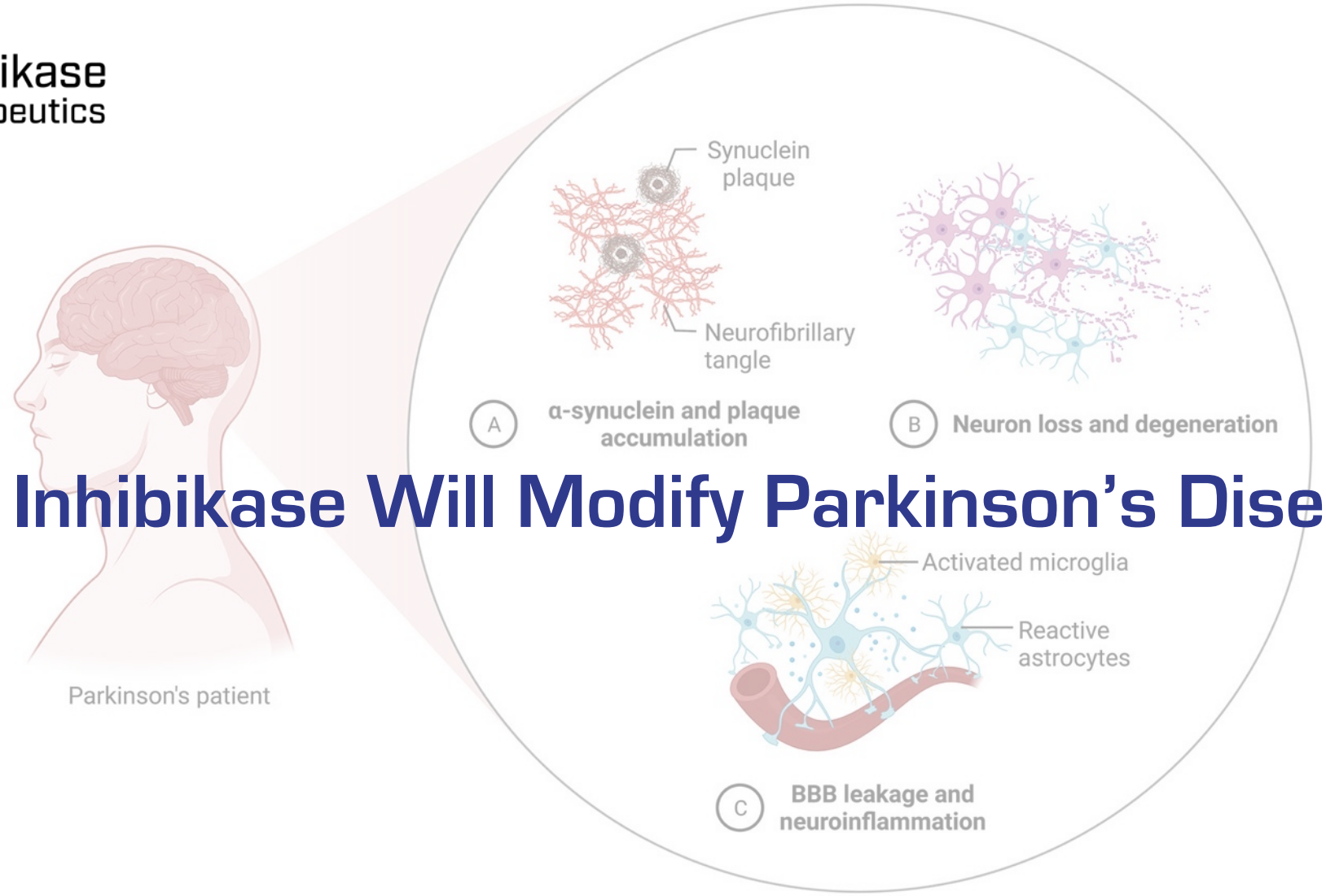
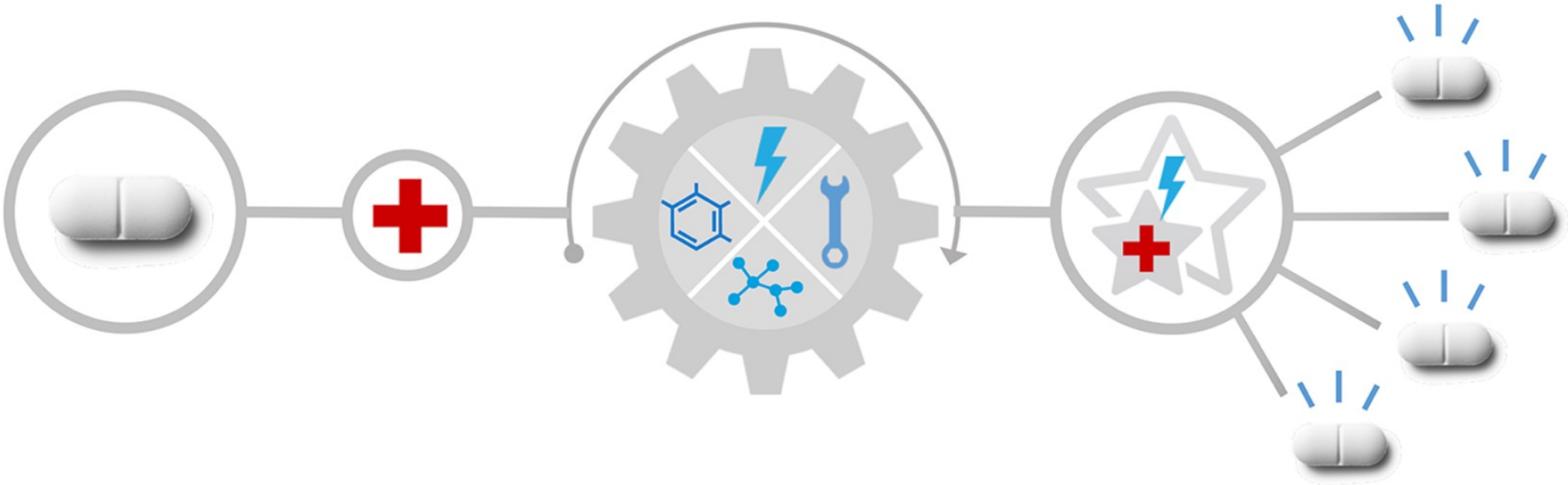
How Inhibikase Will Modify Parkinson's Disease



Re-engineering Approach with Metabolism Preserved (RAMP™)



Start with **validated kinase inhibitor** that has **established safety profile**

Re-engineer with specific criteria to enable same or better efficacy at lower dose

Generate **family of novel drug molecules** with **improved potency** and **retained safety** profile

Low Toxicity, Selective, Brain Penetrant c-Abl Inhibitor in Clinical Development

IkT-148009
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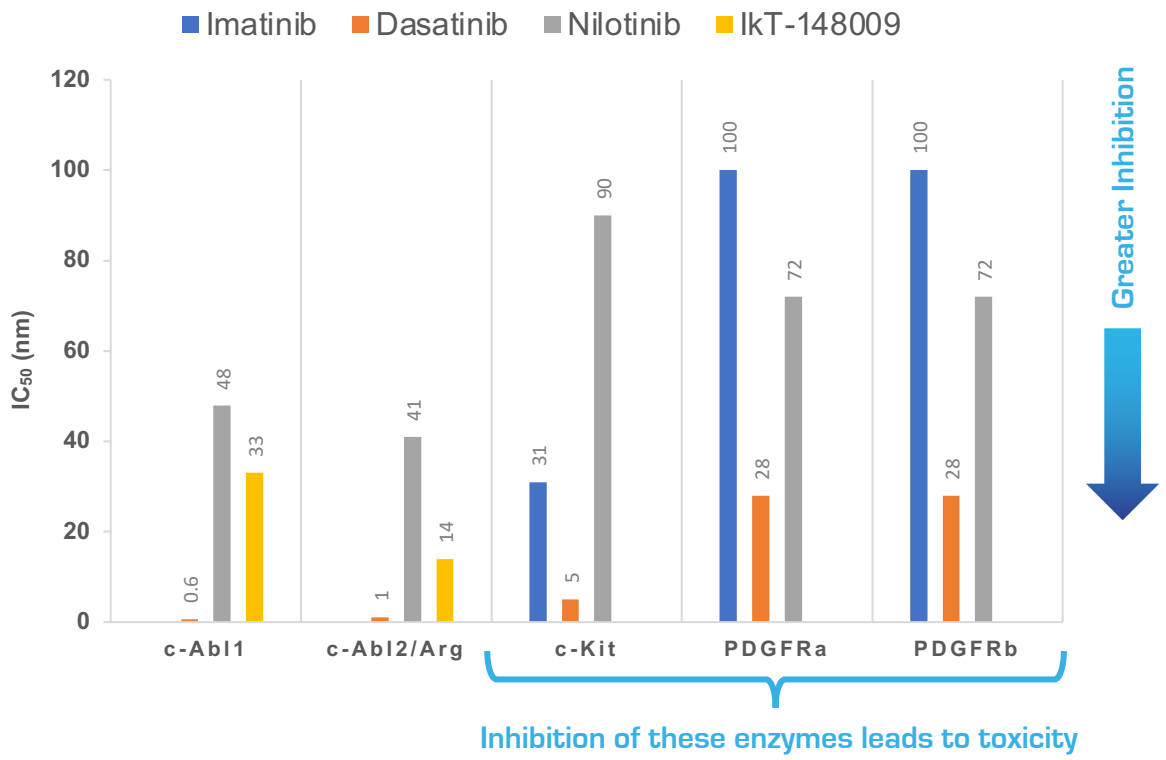
- **Selective Inhibitor of c-Abl1 and Abl2/Arg**
- **Design suppressed toxicity of cancer drugs in this class**
- **Low or no apparent organ toxicity at current level of knowledge**
- **High brain penetrance**



TOXICOLOGY IN RAT/MONKEY[1]	
Human equivalent dose of 1460 mg	
Cardiovascular	None
Renal	None
Liver	None
Bone marrow	None
Sternum	None
Blood	None
PBMCs	Slight increase in neutrophils within normal limits
Cytotoxicity	None in primary or mature cells
Sustained brain concentration	> 1 micromolar

[1]13 week and 39 week toxicology data shows IkT-148009 has a more favorable toxicity profile as dosing is extended

c-Abl inhibition by IkT-148009 blocks the four pillars of Parkinson's Disease in Validated Animal Models[1]

a-Synuclein Toxicity

IkT-148009 Inhibikase Therapeutics

clears to baseline in the organs of disease

Neurodegeneration

IkT-148009 Inhibikase Therapeutics

preserves as much as 85% of brain neurons

Motor Dysfunction

IkT-148009 Inhibikase Therapeutics

restores as much as 90% of lost function

Neuroinflammation

IkT-148009 Inhibikase Therapeutics

suppresses to near baseline in the organs of disease

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Clinical Development in Neurodegeneration

PHASE 1/1B:

Dose Proportional Clinical Pharmacokinetics & No Clinically Significant Adverse Events

Category	Demographic	Healthy Subjects Value (% of Total N=88)	Parkinson Patient Value (% of Total, N=13)
Gender	Female	34 (38.6)	6 (42.8)
	Male	54 (61.4)	7 (57.2)
Age	Average (SD)	57.9 (5.72)	62.5
	Median	58.0	62
	Range	45, 69	57, 70
Ethnicity	Hispanic or Latino	13 (14.8)	3 (23.1)
	Not Hispanic or Latino	75 (85.2)	10 (76.9)
Race	Black or African American	54 (61.4)	2 (15.4)
	White	33 (37.5)	11 (84.6)
	Other	1 (1.1)	0 (0)
Adverse events		7 (7.9), all clinically insignificant	5 (38.5)

No GI
No Cardiovascular
No Hematological

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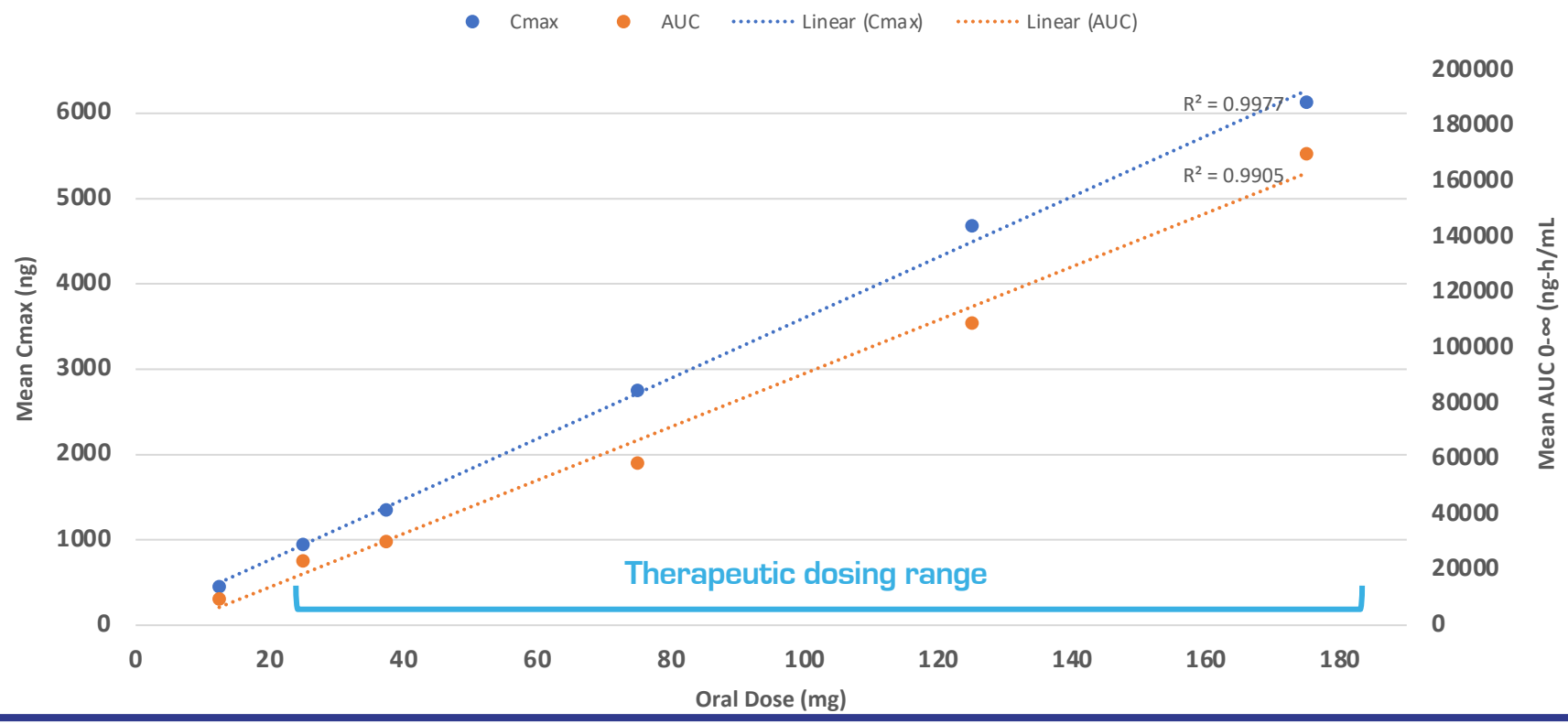
PHASE 1:

Dose Proportional Clinical Pharmacokinetics & No Clinically Significant Adverse Events

Clinical Pharmacokinetics of IkT-148009-SAD



SIGNIFICANCE OF CLINICAL PHARMACOKINETICS

High exposures at low oral dose, linearly dose proportional up to 175 mg. Exposures at 75 mg IkT-148009 comparable to 500 mg imatinib[1]

[1]FDA summary data for approval 21-335

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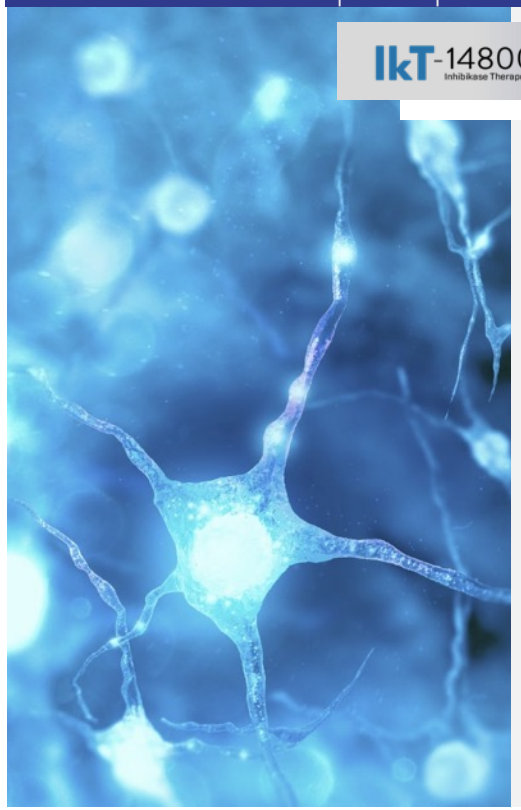
PHASE 1B:
Pharmacokinetics in patients similar to elderly healthy subjects

			$T_{1/2}$ (h)	T_{max} (h)	C_{max} (ng/ml)	AUC_{0-24} (ng-h/mL)	V_z/F (l)	CL (l/h)
Day 1	**Mean**	**25 mg**	**15.4**	**5**	**1040**	**12700**	**32.5**	**1.52**
N=6	SD	**Healthy**	11.3	4	419	6010	14.7	0.905
Day 7	**Mean**		**27.4**	**4.67**	**1770**	**25400**	**42.8**	**1.1**
N=6	SD		5.09	1.63	807	9260	15.3	0.384
Day 1	**Mean**	**50 mg**	**10.1**	**4.67**	**1720**	**19400**	**37.2**	**2.51**
N=6	SD	**PD**	2.7	1.03	737	9470	22.8	1.2
Day 7	**Mean**		**24.9**	**3.67**	**2560**	**32500**	**57.1**	**1.61**
N=6	SD		3.86	1.51	564	8500	12.4	0.312

[1]FDA summary data for approval 21-335

CLINICAL PHASE 2:
'201' Trial

JUNE, 2022 ▶	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18



IkT-148009 **PHASE 2A** (Up to 12 months) ⟶

IkT-148009 Inhibikase Therapeutics — PHASE 2A '201' TRIAL / 3 Months Dosing Across 3 Doses

- 3 dosing cohorts, 1 placebo cohort
- 120 patients' total
- 30 patients/dose 3:1 randomized 12-week dosing 1x/day
- Treatment naïve/Early state patients (H&Y ≤ 3.0)
- Primary endpoints: safety, tolerability
- Secondary endpoints UPDRS II, III, II+III, PGI-S, CGI-S, Epworth Sleepiness Scale, NMSS, PDQ-39, CSBM, PAGI-SYM, PAC-QOL, PAGI-SYM-QOL
- Exploratory endpoints: Phospho-alpha-synuclein GI, Skin and CSF; Whole Gut Transit Time (SmartPill™)
- Descriptive statistics

Animal GI Recovery < 4 weeks
Animal Brain Recovery < 8 weeks

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Stable-Phase Chronic Myelogenous Leukemia Market and Strategy

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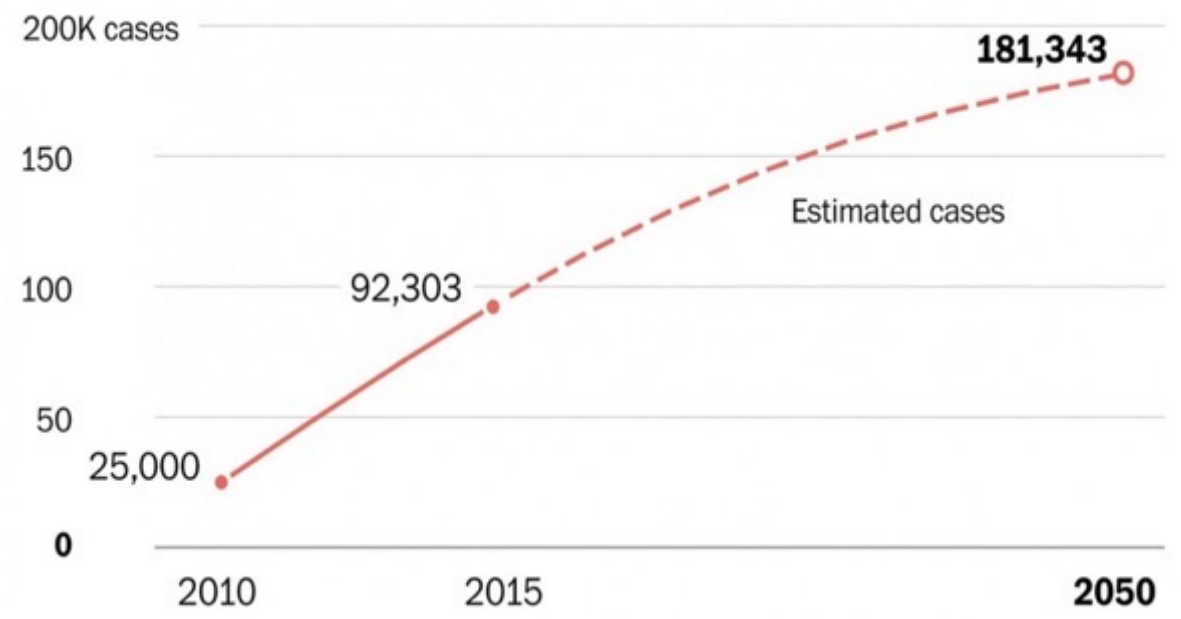
CML in the U.S.[1] Accessible Market Opportunity Despite Presence of Generic

Prevalence of Chronic Myeloid Leukemia in the U.S.



- Patients commonly switch due to intolerance or lack of response[3]
- Intolerance to Gleevec® occurs in 30% of patients, leading to lack of treatment compliance and relapse[4]
- Second generation treatments have severe adverse events (i.e. Sprycel® or Tasigna®)
- Best approach in our view: reduce Gleevec® side effects

[1]Jabbour E, Kantarjian H. Am. J. Hematol. 89:548–556
[2]IMS-Iqvia retail sales data 2016-2020
[3]Am J. Hematology (2019) 94:46-54
[4]Annals of Hematology (2018) 97:1357–1367

- $330.5 million in net U.S. Sales for branded and generic Gleevec®[2]
- > 57% market share Generic Gleevec®
- 50% of recipients experience Grade 2 GI adverse events

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IkT-001Pro:

Lower GI Toxicity Alternative to generic Gleevec®

Measurement of IkT-001Pro in Non-Human Primates

	No Adverse Event Level (mg/kg) **NOAEL**	Cmax (mean, ng/mL)	Tmax (mean, h)	AUC_{0-T} (mean, ng-h/mL)
Imatinib (Day 91)[1]	15	176/206 (M/F)	4/3 (M/F)	1540/1960 (M/F)
IkT-001Pro (Day 28)	**75**	400/318 (M/F)	5.3/3.7 (M/F)	**5220/3890 (M/F)**

[1]FDA summary data for approval 21-335

RESULTS SUGGEST THAT:

- ✓ Achieve dose flexibility, including use of higher dosing due to lower AEs
- ✓ Suppress GI and other adherence-related adverse events

NO ADVERSE EVENTS

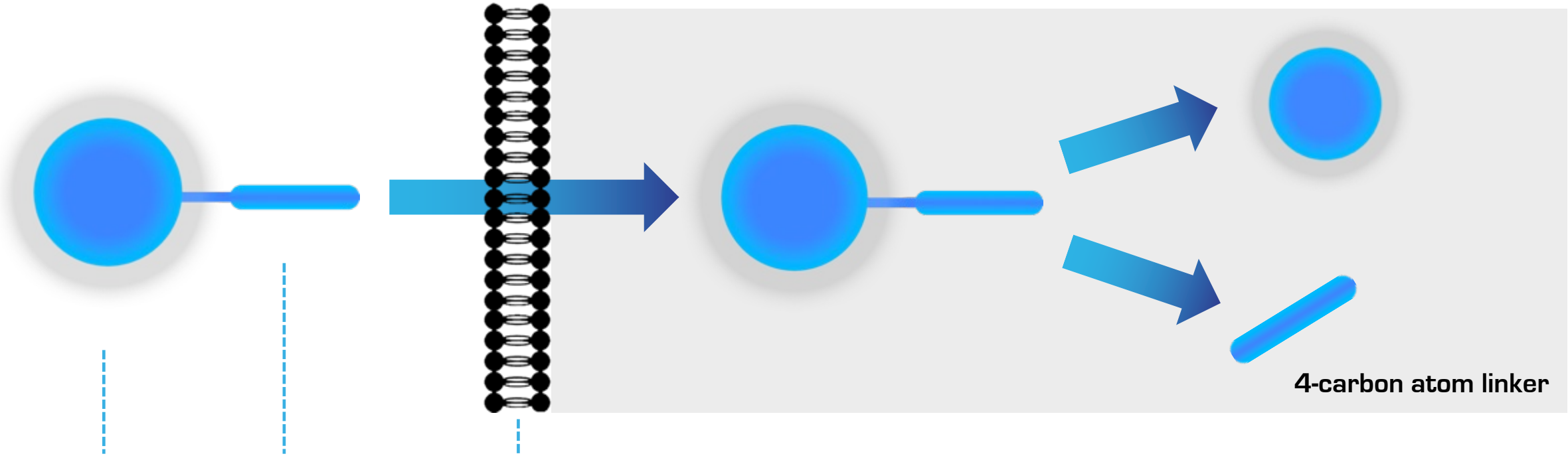
3x

higher dose of imatinib delivered as 001Pro

3x

increased exposure

IkT-001Pro releases the active ingredient imatinib only in blood



pH 2-6
(stomach, ileum, duodenum)

pH 7⁺ (blood)
Lifetime in blood < 10 min

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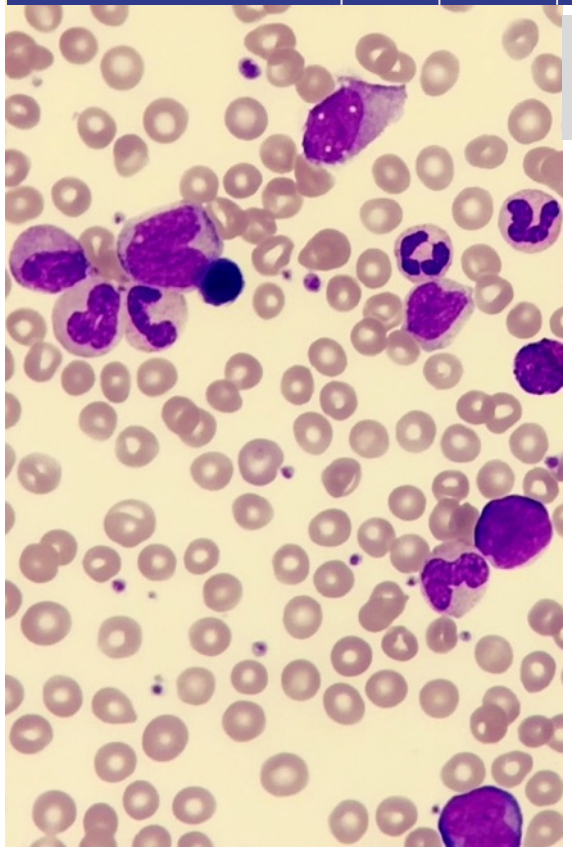
Clinical path to NDA

JUNE, 2022 ▶	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18



IkT- 001Pro **Bioequivalence** (Up to 3 months)

IkT- 001Pro

Bioequivalence '501' Trial

Single dose two-part trial to bioequivalence

- Part 1: 3 dosing cohorts, 10 subjects each to find dose equivalent to 400 mg imatinib mesylate measuring 96 hr pharmacokinetics
- Part 2: Confirmatory single dose measure in 32 subjects confirming 96 hr pharmacokinetics
- Approval to be sought on this basis

IkT- 001Pro

Planned '502' Trial

Superiority to standard of care

- Wait-list control crossover design comparing 001Pro to 400 mg imatinib over 6 months
- 98 patients dosed 1x/day
- Primary endpoints are patient-reported outcome measures of GI disturbance and frequency of diarrhea.
- Planned to conduct '502' trial coincident with pursuit of NDA

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Selected Financial and Stock Data

Capitalization Table	June 30, 2022
Common Shares Outstanding	25,227,051
Options (WAEP: $2.25)	4,238,056
Warrants (WAEP: $5.21)	1,561,913
Fully Diluted Shares Outstanding	**30,622,020**

$20.8M non-dilutive grant revenue pre-IPO (NIH, DoD, State gov'ts)

Balance Sheet	June 30, 2022 (last reporting period)
Current Assets:	
Cash	$40,750,133
Grants Receivable	$110,141
Prepaid research and development	$107,000
Prepaid expenses and other current assets	$1,502,725
Total Current Assets	**$42,469,999**
Total Current Liabilities	$4,054,450
Working Capital	$38,415,549
Active grant funding available in accounts held by the U.S. treasury	$385,888
Total Working Capital	**$38,801,437**

Upcoming Milestones: 3Q 2022

- First randomized patient in IkT-148009 Phase 2a study in treatment naive Parkinson's patients
- Initiate food-effect study for IkT-148009 to evaluate pill formulation PK and effect of food on PK
- Complete first of two animal model validation studies of IkT-148009 in MSA
- Seek orphan drug designation in the US for IkT-148009
- in MSA, begin process for EU27/UK
- Characterize novel compounds as follow-ons to IkT-148009

- Commence bioequivalence clinical studies following FDA review of the IND
- Design and develop superiority studies for IkT-001Pro relative to standard-of-care
- Identify and begin developing commercial partnership

Inhibikase Therapeutics

Management Team with Deep Experience in Drug Development and Commercialization

Milton Werner, PhD
President & CEO

Previously, Dr. Werner served as Director of Research at Celtaxsys. From September 1996 until June 2007, Dr. Werner was a Head of the Laboratory of Molecular Biophysics at The Rockefeller University in New York City. Throughout his scientific career, Dr. Werner has been an innovator integrating chemistry, physics, and biology into a comprehensive approach to solving problems in medicine. Dr. Werner is the author or co-author of more than 70 research articles, reviews, and book chapters and has given lectures on his research work throughout the world.

Joseph Frattaroli, CPA
Chief Financial Officer

Mr. Frattaroli is a certified public accountant with more than 15 years of experience in public company filings and compliance for Nasdaq and OTC Markets companies. Previously, he provided chief financial officer and consulting services for several emerging biopharmaceutical and medical device companies, with responsibilities that included capital formation, deal structuring, and assisting private companies in their transition to becoming publicly traded SEC registrants.

C. Warren Olanow, MD,
Interim Chief Medical Officer and Chief Executive Officer of CLINTREX.

Dr. Olanow is the former Henry P. and Georgette Goldschmidt Professor and Chairman of the Department of Neurology at the Mount Sinai School of Medicine Prior to joining Mount Sinai, he served on the faculties of McGill University, Duke University, and the University of South Florida. He is the former President of the Movement Disorder Society, past President of the International Society of Motor Disturbances, and former Treasurer of the American Neurological Association. He has served on the executive committee of the Michael J. Fox Foundation Scientific Advisory Board, and he is the former Chairman of the Scientific Advisory Board of the Bachmann-Strauss Parkinson Foundation and of the Dystonia Foundation. Dr. Olanow is the former Co-Editor-in-Chief of the journal Movement Disorders. Dr. Olanow received his medical degree from the University of Toronto, performed his neurology training at the New York Neurological Institute at Columbia Presbyterian Medical Center at Columbia University, and undertook postgraduate studies in neuroanatomy at Columbia University and authored more than 600 articles in the field of neurodegeneration.

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Mr. Dennis Berman

- Co-founder, board member, and/or seed investor in many private biotechnology and technology companies, five of which have gone public.
- Currently serves as the President of Molino Ventures, LLC a board advisory and venture capital firm and was co-founder and Executive Vice President of Corporate Development of Tocagen.
- Seed investor, co-founder, and/or board member of Intervu, Kintera, Inc., Gensia, Calabrian

Dr. Roy Freeman, MD

- Professor of Neurology at the Harvard Medical School and Director of the Center for Autonomic and Peripheral Nerve Disorders in the Department of Neurology at Beth Israel Deaconess Medical Center
- Former chairman of the World Federation of Neurology research group on the autonomic nervous system, former President of the American Autonomic Society, and former chairman of the Autonomic Section of the American Academy of Neurology.
- Editor-in-Chief of Autonomic Neuroscience: Basic and Clinical and on the editorial boards of The Clinical Journal of Pain, Pain: Clinical Updates, and Clinical Autonomic Research.
- Serial founder of several companies in pain and neurodegenerative disease and is on the scientific advisory boards of many large and small pharmaceutical and biotechnology companies.

Dr. Paul Grint, MD

- 20+ years experience in biologics and small-molecule research and development, including the successful approval and commercialization of products in the infectious diseases, immunology, and oncology therapeutic areas.
- Director of Amplyx Pharmaceuticals and Synedgen.
- Served in senior management roles at Cerexa, Forest Laboratories, Kalypsys, Pfizer, IDEC Pharmaceuticals, and Schering-Plough Corporation.
- Fellow of the Royal College of Pathologists and a medical degree from St. Bartholomew's Hospital College, University of London.

Ms. Elizabeth O'Farrell

- 25-year career with Eli Lilly and Company, lastly serving as Chief Procurement Officer and Leader, Global Head of Shared Services
- Served in senior management at Lilly including Senior Vice President, Policy and Finance; Senior Vice President, Finance; Chief Financial Officer, Lilly USA; Chief Financial Officer, Lilly Canada; and General Auditor. Before joining Eli Lilly, Ms.
- Director of PDL BioPharma, Geron Corporation and Lensar
- BS in accounting with honors and an MBA in management information systems from Indiana University.

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Professor of Neurology, University of South Florida College of Medicine - Director USF Parkinson's Disease and Movement Disorders Center

Jeffrey Kordower, PhD
Alla V and Solomon Jesmer Professor of Aging & Neurological Sciences Rush University Medical Center

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President and Senior Scientist, Institute of Neurodegenerative Disorders

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Director, Johns Hopkins Center for Neurogastroenterology
Professor of Medicine

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