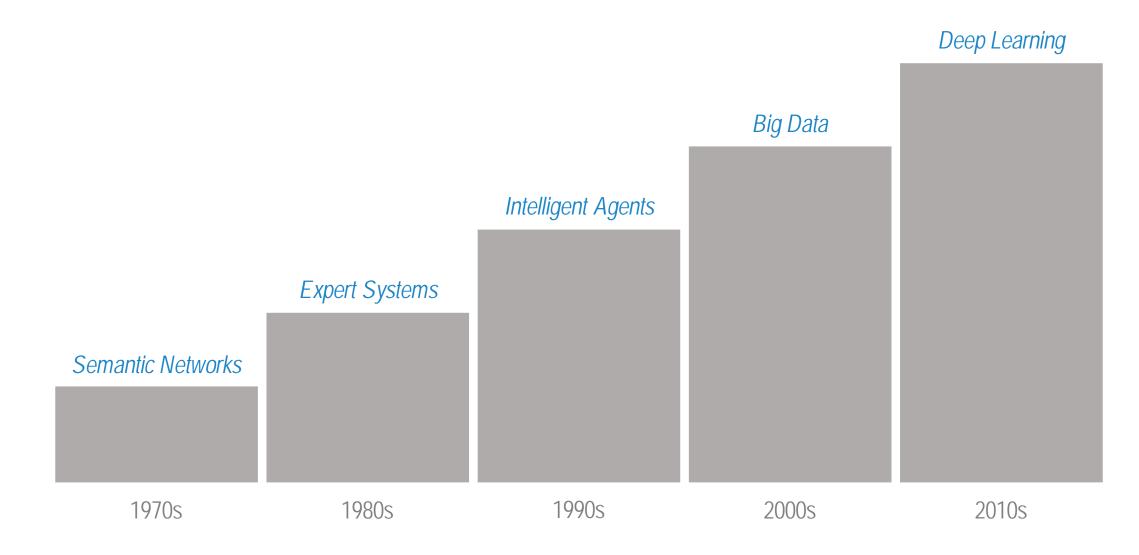


PHARMACEUTICALS DISCOVERED WITH AI

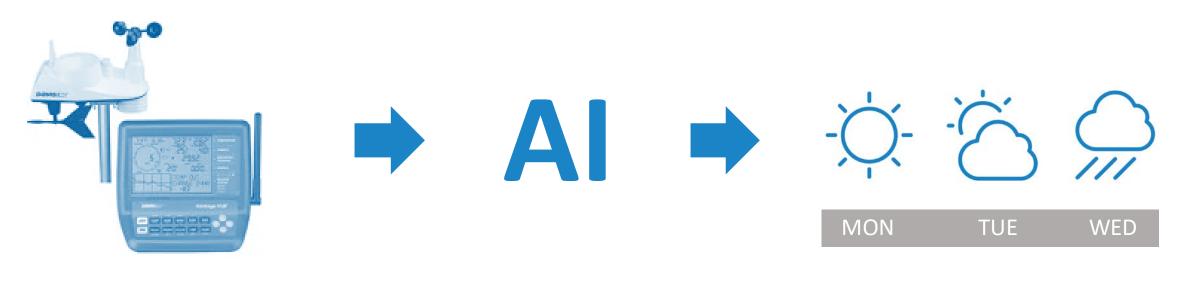
ARTIFICIAL INTELLIGENCE FOR DISCOVERY SCIENCE FEBRUARY 2021

AI HAS BEEN AROUND FOR DECADES





AI PREDICTS EVENTS USING REAL WORLD DATA



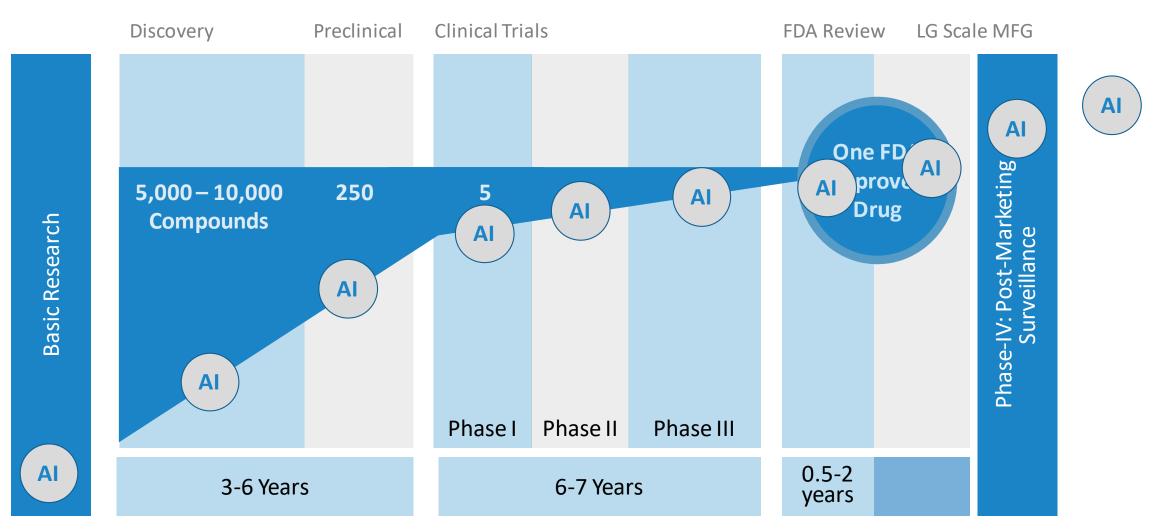
Collect Weather Data

Process

Weather Prediction



AI APPLICATIONS IN DRUG DISCOVERY & DEVELOPMENT





| Source: Tufts Center for the Study of Drug Development, Pharm aceutical Research and Manufacturers of America

OUR PRODUCTS / New MEDICINES FOR COMPLEX DISEASE



New Biology In Disease

Small Molecule

90% of Today's Medications



CASE STUDY: SYSTEMIC LUPUS ERYTHEMATOSUS (LUPUS)

Market



Cases Worldwide

Pain

Fatigue / Inflammation / Fever



Standard of Care With Limited Efficacy

Opportunity

TXR-711 & TXR-712 in vivo Highlights

- Improved tolerability over rescue therapy
- Novel MOAs in Lupus
- Significant decrease in inflammation
- Significant improved kidney function



2024 Market (\$/Year)¹



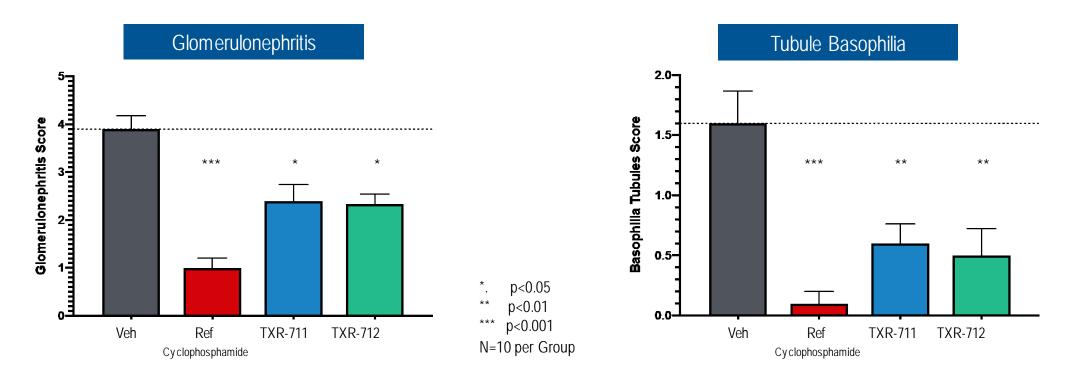


DISCOVERY PROCESS/ CANDIDATES TXR-711 & TXR-712 IDENTIFIED WITHIN 3 MONTHS

Al-Driven Discovery	AI-Assisted Review	Hit Diligence	Preclinical
Diverse Data, Methods:	Novelty and Safety:	PhD-led Deep Dive:	Optimal Disease Models:
• 25 data sources	Novel MOA	MOArelevance	• Test diverse MOAs
• 65 methods	Safety profile	MOAsafety	CRO availability
• 2M compound chemistry library	ADME properties	IP development path	• Rapid <i>in vivo</i> efficacy
	1 2 3 4 5 48		RANKER CONTRACTOR
50K Molecules	3K Molecules	80 Molecules	9 Molecules



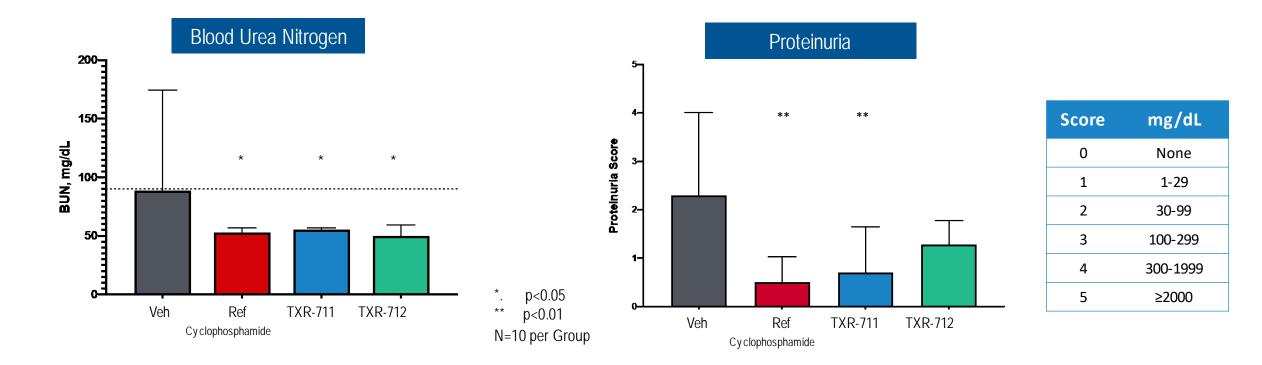
SIGNIFICANT DECREASE IN INFLAMMATION / with unoptimized compounds



Glomerulonephritis and tubule basophilia – renal Inflammation measures



SIGNIFICANT IMPROVED KIDNEY FUNCTION / WITH UNOPTIMIZED COMPOUNDS



BUN and proteinuria – measure renal function efficacy







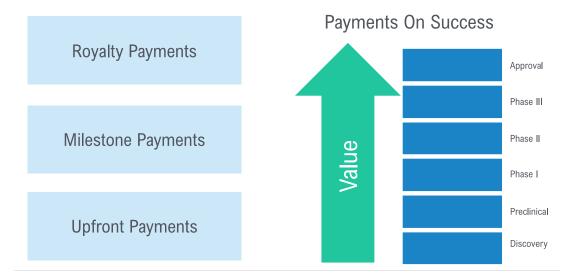
DISEASE AREA	DISCOVERY	PRECLINICAL	IND-ENABLING	PHASE 1
Fibrotic				
Chronic Kidney Disease (CKD) Idiopathic Pulmonary Fibrosis (IPF) Nonalcoholic Steatohepatitis (NASH) Endometriosis				
Immunology/Inflammatory				
Lupus (SLE) Undisclosed Imm2 Undisclosed Imm3 Undisclosed Inf1				
Oncology				
Glioblastoma Liver Cancer (HCC) Lung Cancer (NSCLC) Undisclosed Onc4 Undisclosed Onc5 Undisclosed Onc6 Undisclosed Onc7 Undisclosed Onc8				
Other				
Glaucoma Undisclosed Meta2 Undisclosed Neuro1 Undisclosed Meta1				Key twoXAR Partnered



PARTNERSHIP OPPORTUNITIES

Rapidly Launch New Disease Areas

- New Biology / Discovery
- Preclinical & Scientific Guidance
- KOL & CRO Connections



PARTNER BENEFIT



From zero to in vivo



Screen 10-15 Hits





PHARMACEUTICALS DISCOVERED WITH AI

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