

# TAKEDA R&D INVESTOR DAY 2019



NEW YORK, NY

November 14, 2019

Better Health, Brighter Future

## R&D DAY AGENDA – NEW YORK, NOVEMBER 14, 2019



TIME	AGENDA
12:30 – 12:35	<b>Welcome and Opening Remarks</b> <i>Sheelagh Cawley-Knopf, Head R&amp;D Global Portfolio Strategy</i>
12:35 – 12:45	<b>Takeda: A Global Values-Based, R&amp;D-Driven Biopharmaceutical Leader</b> <i>Christophe Weber, President &amp; CEO Takeda</i>
12:45 – 13:20	<b>Translating Science into Highly Innovative, Life-changing Medicines</b> <i>Andy Plump, President R&amp;D</i>
13:20 – 13:45	<b>Oncology and Cell Therapies with Spotlight on CAR-NK</b> <i>Chris Arendt, Head Oncology Drug Discovery Unit</i>
13:45 – 14:05	<b>Spotlight on Oncology Opportunities</b> <ul style="list-style-type: none"> <li>• <b>TAK-788</b> : <i>Rachael Brake, Global Program Lead</i></li> <li>• <b>Pevonedistat</b> : <i>Phil Rowlands, Head Oncology Therapeutic Area Unit</i></li> </ul>
14:05 – 14:20	<b>Break</b>
14:20 – 14:45	<b>Rare Diseases &amp; Gene Therapy</b> <i>Dan Curran, Head Rare Disease Therapeutic Area Unit</i>
14:45 – 15:00	<b>Spotlight on Orexin2R agonists</b> <i>Deborah Hartman, Global Program Lead</i>
15:00 – 15:20	<b>Therapeutic Area Focus in GI with Spotlight on Celiac Disease</b> <i>Asit Parikh, Head GI Therapeutic Area Unit</i>
15:20 – 16:00	<b>Panel Q&amp;A Session</b>
16:00	<b>Drinks reception</b>

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## Financial information

Takeda's financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS").

The revenue of Shire plc ("Shire"), which were presently, presented in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"), have been conformed to IFRS, without material difference.

The Shire acquisition closed on January 8, 2019, and our consolidated results for the fiscal year ended March 31, 2019 include Shire's results from January 8, 2019 to March 31, 2019. References to "Legacy Takeda" businesses are to our businesses held prior to our acquisition of Shire. References to "Legacy Shire" businesses are to those businesses acquired through the Shire acquisition.

This presentation includes certain pro forma information giving effect to the Shire acquisition as if it had occurred on April 1, 2018. This pro forma information has not been prepared in accordance with Article 11 of Regulation S-X. This pro forma information is presented for illustrative purposes and is based on certain assumptions and judgments based on information available to us as of the date hereof, which may not necessarily have been applicable if the Shire acquisition had actually happened as of April 1, 2018. Moreover, this pro forma information gives effect to certain transactions and other events which are not directly attributable to the Shire acquisition and/or which happened subsequently to the Shire acquisition, such as divestitures and the effects of the purchase price allocation for the Shire acquisition, and therefore may not accurately reflect the effect on our financial condition and results of operations if the Shire acquisition had actually been completed on April 1, 2018. Therefore, undue reliance should not be placed on the pro forma information included herein.

Our mission is to strive towards Better Health and a Brighter Future for people worldwide through leading innovation in medicine







# ~50,000

PEOPLE DEDICATED TO BRINGING  
BETTER HEALTH TO PATIENTS

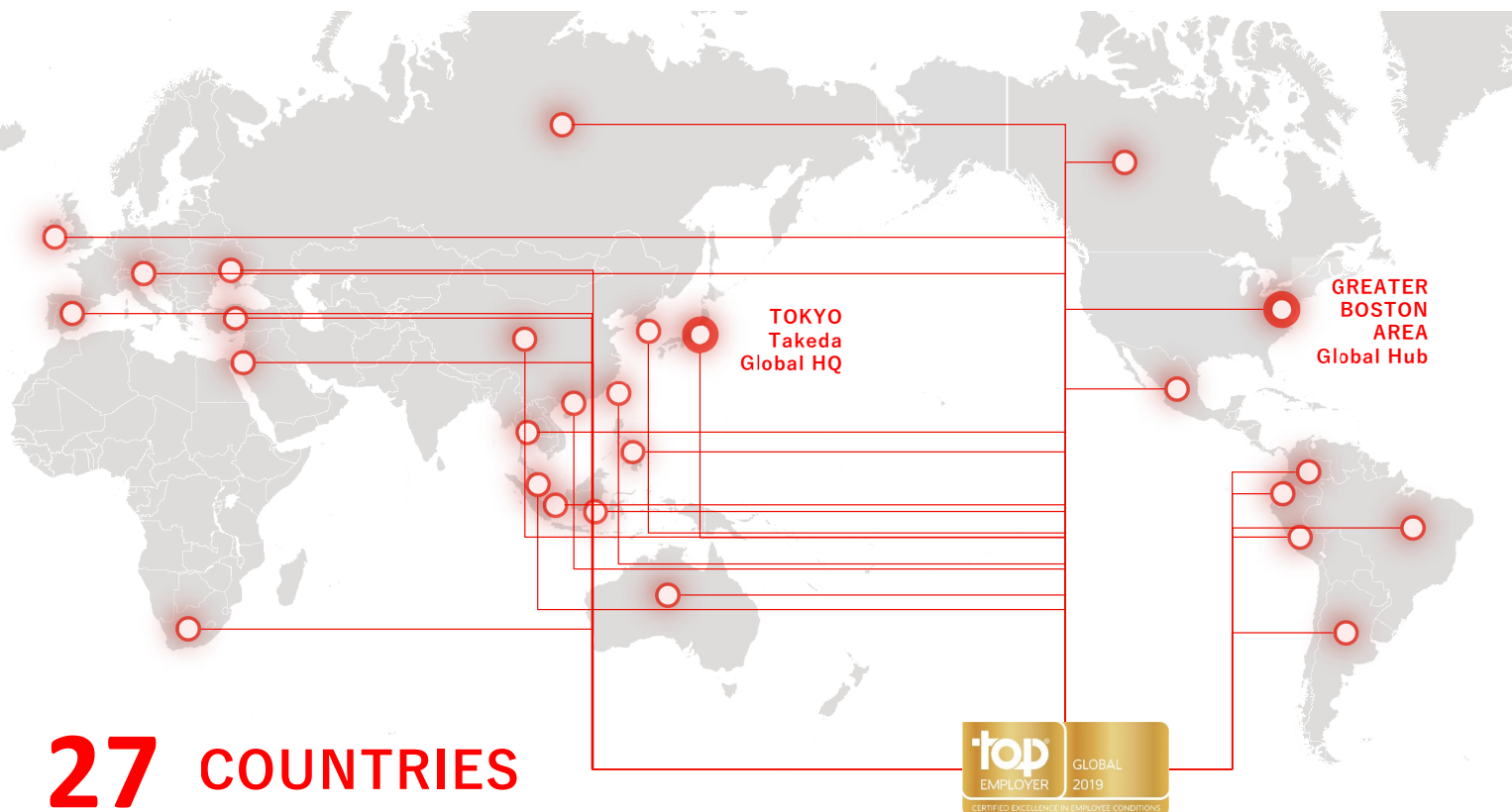
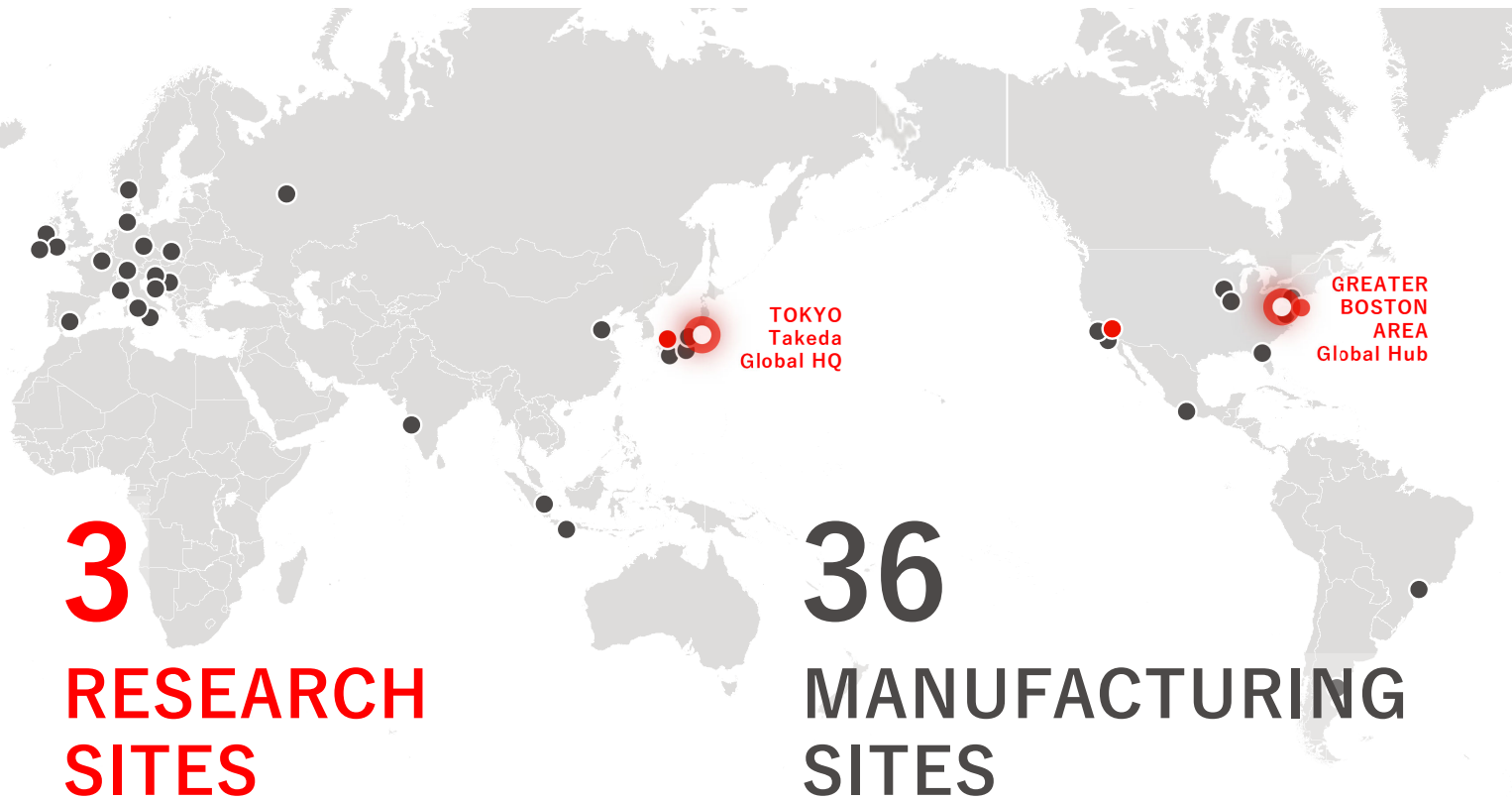


ZURICH

TOKYO  
Takeda  
Global HQ

SINGAPORE

GREATER  
BOSTON  
AREA  
Global Hub







**TAKEDA-ISM**



**TAKEDA-ISM**

01

PATIENT

PATIENT

01

TRUST

02

REPUTATION

03

BUSINESS

04

誠実

INTEGRITY

公正

Fairness

正直

Honesty

不屈

Perseverance

TAKEDA-ISM





HCPs



PATIENTS



SOCIETY



GOVERNMENT  
AGENCIES

02  
TRUST

03  
REPUTATION



INNOVATION



ACCESS TO MEDICINE



CORPORATE SOCIAL  
RESPONSIBILITY

PATIENT

01

TRUST

02

REPUTATION

03

BUSINESS

04

誠実

INTEGRITY

公正

Fairness

正直

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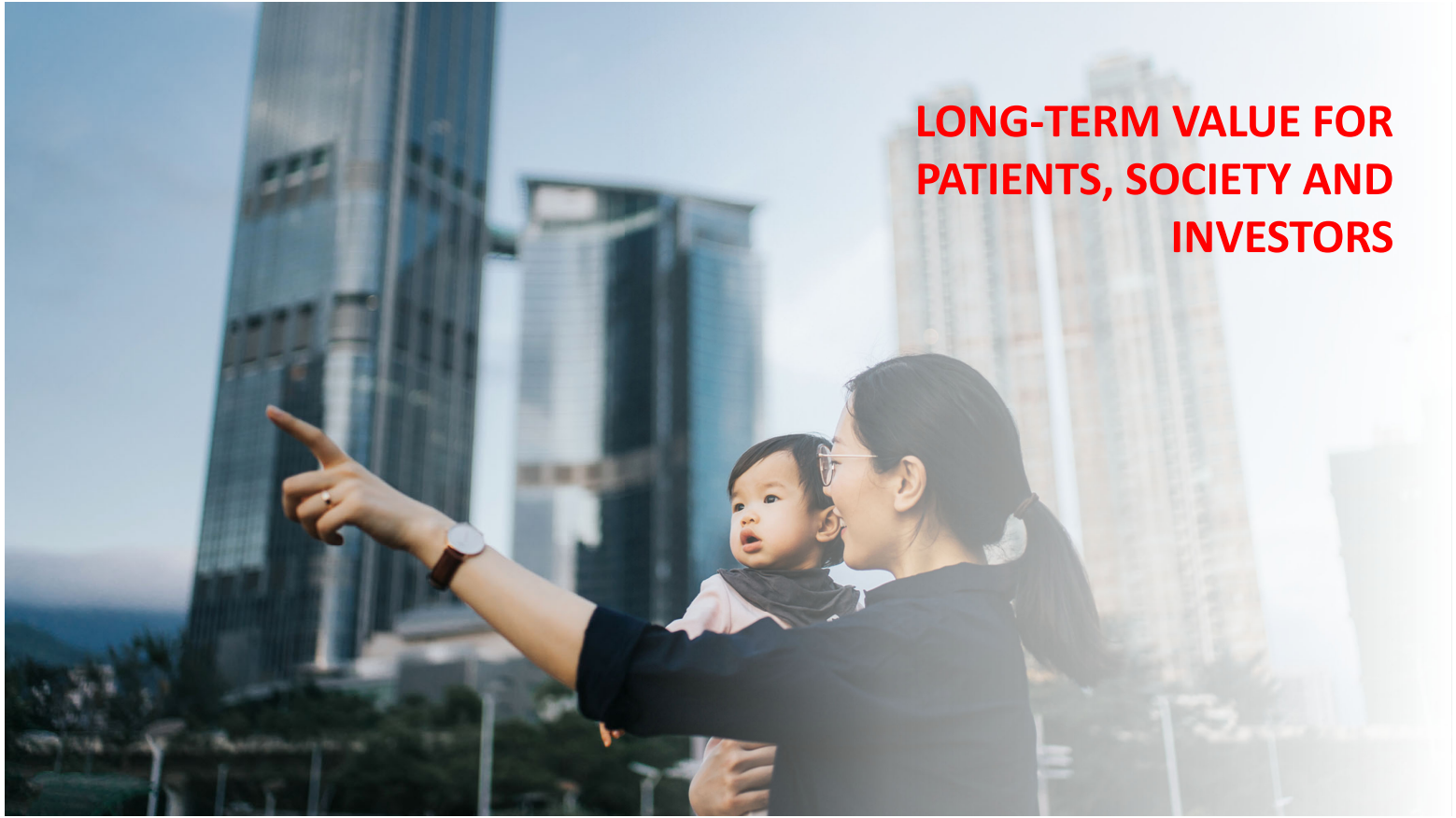
TAKEDA-ISM





04

BUSINESS



LONG-TERM VALUE FOR  
PATIENTS, SOCIETY AND  
INVESTORS

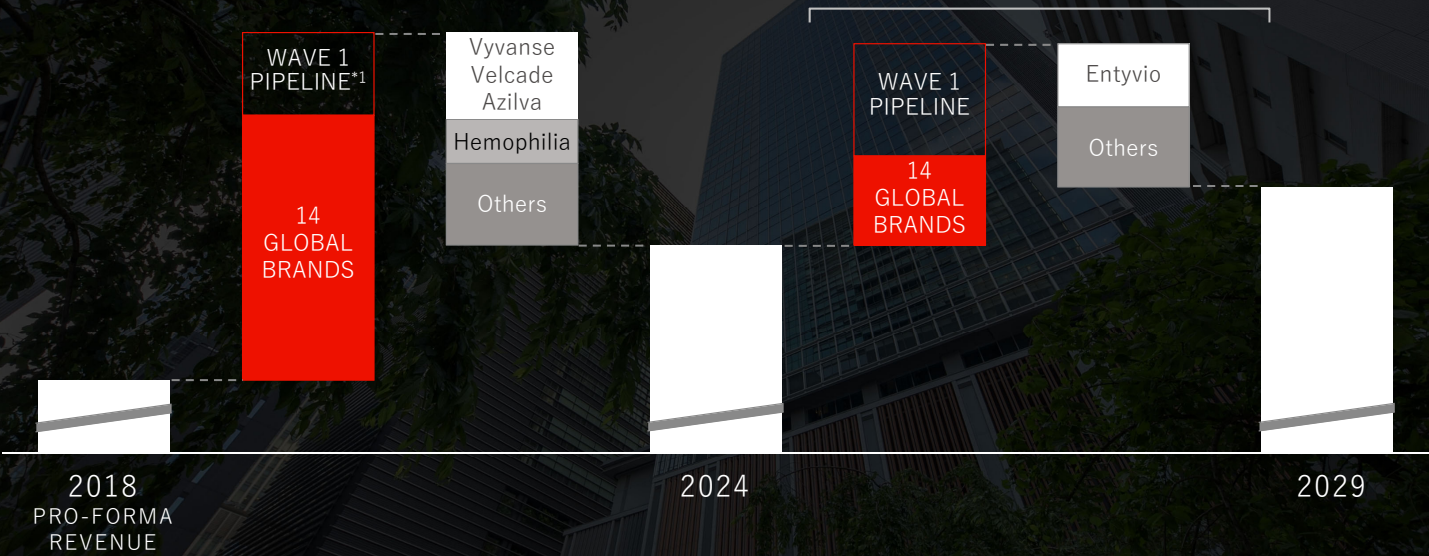


SCIENCE  
DRIVEN  
COMPANY  
WITH A  
FOCUSED  
MIND



## Positioned for Sustainable Revenue Growth

Potential Wave 2 pipeline not included



Note: The above chart represents conceptual changes in revenue through 2024 and 2029 demonstrating growth over time offsetting loss of exclusivities and achieving a single digit growth as compared to 2018 pro forma revenue which represents the sum of Takeda revenue for FY2018 plus Shire revenue for the same period (not including the Legacy Shire oncology business, which was sold in August 2018), converted to JPY at the rate of \$1 = 111 JPY, and converted from US GAAP to IFRS. Actual future net sales achieved by our commercialized products and pipelines will be different, perhaps materially so, as there is a range of possible outcomes from clinical development, driven by a number of variables, including safety, efficacy and product labelling. In addition, if a product is approved, the effect of commercial factors including the patient population, the competitive environment, pricing and reimbursement is also uncertain. Sales estimate in Wave 1 Pipeline is non-risk adjusted.

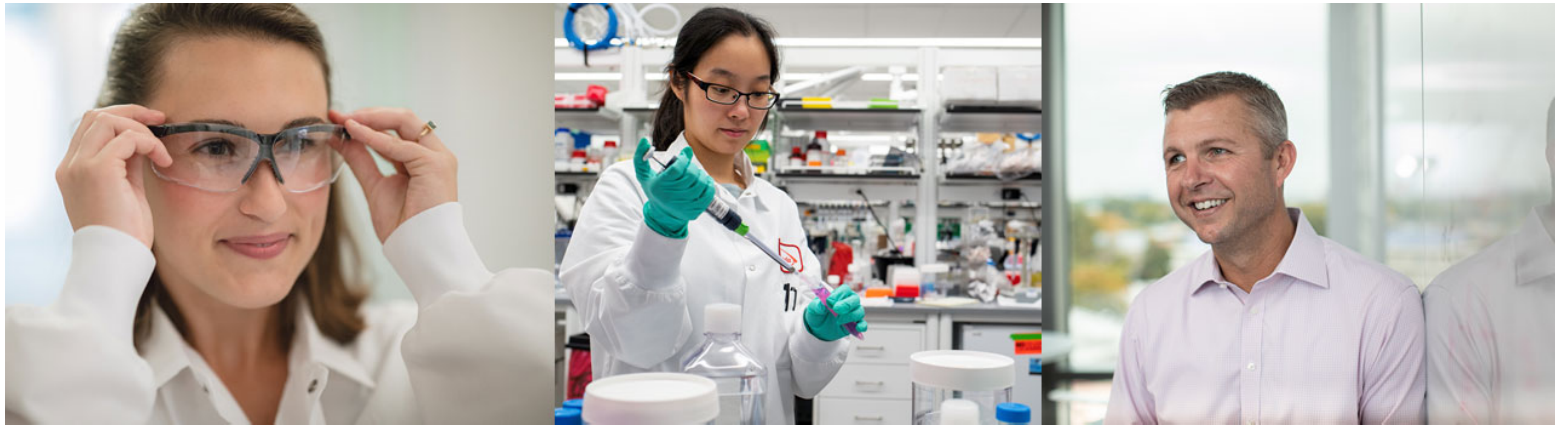


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## TRANSLATING SCIENCE INTO HIGHLY INNOVATIVE LIFE-CHANGING MEDICINES



Andy Plump MD, PhD

President R&D

Takeda Pharmaceutical Company Limited

New York, NY

November 14, 2019

Better Health, Brighter Future

## WHAT YOU WILL HEAR TODAY



# 1

Our portfolio and pipeline will drive growth and offset key patent expirations

# 2






We are investing in novel mechanisms and capabilities for a sustainable future

# 3

We have cultivated an environment of empowerment, accountability and agility

# WE ARE POSITIONED TO DELIVER NEAR-TERM & SUSTAINED GROWTH



TARGET APPROVAL	WAVE 1 <sup>1</sup>					WAVE 2 <sup>2</sup>						
	CLINICAL-STAGE NMEs					PLATFORMS						
	FY20	FY21	FY22	FY23	FY24	FY25 AND BEYOND						
 ONCOLOGY		TAK-788 <sup>3</sup> 2L NSCLC		TAK-007 Hematologic malignancies	TAK-924 AML	TAK-164 GI malignancies	TAK-252 Solid tumors		CELL THERAPY AND IMMUNE ENGAGERS	TARGETED INNATE IMMUNE MODULATION	NEXT-GEN CHECKPOINT MODULATORS	
		TAK-924 <sup>3</sup> HR-MDS		TAK-788 1L NSCLC		TAK-573 R/R MM	TAK-981 Multiple cancers					
 RARE DISEASES <i>Immunology Hematology Metabolic</i>		TAK-620 CMV infect. in transplant		TAK-611 MLD (IT)	TAK-607 Complications of prematurity	TAK-079 <sup>4</sup> MG, ITP	TAK-754 HemA	TAK-755 iTTP, SCD	GENE THERAPY			
		TAK-609 Hunter CNS (IT)		TAK-755 cTTP		TAK-531 Hunter CNS						
 NEUROSCIENCE				TAK-935 DEE	Orexin2R-ag (TAK-925/994) Narcolepsy T1	TAK-341 Parkinson's Disease	Orexin2R-ag Sleep Disorders	TAK-041 CIAS NS	GENE THERAPY	OTHER PLATFORMS RNA Modulation Antibody Transport Vehicle		
						TAK-418 Kabuki Syndrome	TAK-653 TRD	TAK-831 CIAS NS				
						WVE-120101 Huntington's Disease	WVE-120102 Huntington's Disease					
 GASTRO-ENTEROLOGY	TAK-721 EoE					Kuma062 Celiac Disease	TAK-101 Celiac Disease	TAK-018 Crohn's Disease (post-op and ileitis)	TAK-671 Acute Pancreatitis	GENE THERAPY	MICROBIOME	CELL THERAPY
						TAK-954 POGD	TAK-906 Gastroparesis	TAK-951 Nausea & vomiting				
 VACCINES		TAK-003 Dengue Vaccine				TAK-214 Norovirus Vaccine	TAK-426 Zika Vaccine	TAK-021 EV71 vaccine				

1. Projected timing of approvals depending on data read-outs; some of these Wave 1 target approval dates assume accelerated approval

2. Some Wave 2 assets could be accelerated into Wave 1 if they have breakthrough data

3. Projected approval date assumes filing on Phase 2 data

4. TAK-079 to be developed in Rare Diseases indications myasthenia gravis (MG) and immune thrombocytopenic purpura (ITP) (FPI projected in each indication in 2H FY19)

Orphan potential in at least one indication  
Estimated dates as of November 14, 2019

## 2019: A WATERSHED YEAR FOR TAKEDA



### INTEGRATION OF SHIRE

- 18 assets added to the clinical pipeline\*
- Creation of a Rare Diseases Therapeutic Area
- Access to world-class Gene Therapy capabilities



### EXPANSION OF OUR GLOBAL BRANDS

- VARSITY study demonstrated head-to-head superiority of Entyvio vs Humira and published in New England Journal of Medicine
- TAKHZYRO indication expansions in bradykinin mediated angioedema
- Expecting >15 approvals in China over the next 5 years



### UNPRECEDENTED NMEs

- 17 NMEs in Phase 2 and Phase 3
- Potentially curative novel mechanisms (e.g. TAK-101, Orexin2R-ag, CAR-NK)
- Momentum in Cell Therapies, including new partnership with MD Anderson

\* Including approved products with ongoing R&D investment

## PATIENT-DRIVEN AND SCIENCE-FIRST IN 3 CORE AREAS



### INNOVATIVE BIOPHARMA



ONCOLOGY



RARE DISEASES



NEUROSCIENCE



GASTROENTEROLOGY

### PLASMA DERIVED THERAPIES



Complementing our  
rare disease focus

### VACCINES BUSINESS UNIT



Differentiated  
Dengue vaccine

## WE ARE DOING MORE FOR OUR PATIENTS



8



POTENTIAL BIC/FIC NMEs IN  
PIVOTAL STUDIES<sup>1</sup>



~40

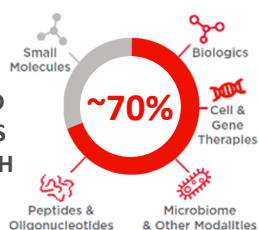
NEW MOLECULAR  
ENTITY CLINICAL  
STAGE ASSETS

~4,500

R&D EMPLOYEES  
GLOBALLY



DIVERSIFIED  
MODALITIES  
IN RESEARCH



PIPELINE WITH  
ORPHAN DRUG  
DESIGNATION<sup>2</sup>



200+

ACTIVE PARTNERSHIPS

1. BIC/FIC Best-In-Class/First-In-Class (incl. relugolix). Three NMEs in pivotal studies in 2018

2. 31 Orphan Drug Designations in at least one indication for assets in Phase 1 through LCM in 2019 versus 15 in 2018



## WE ARE TAKING COURAGEOUS RISKS TO MAKE A CRITICAL DIFFERENCE

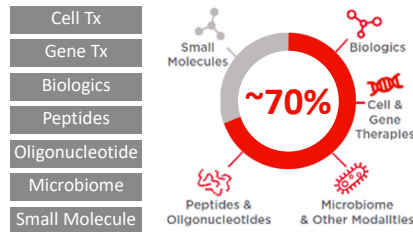
*"There is a considerable need for improved treatments for individuals with NT1, which is caused by the loss of orexin-producing neurons in the brain"*



Dr. Makoto Honda, Sleep Disorders Project Leader,  
Tokyo Metropolitan  
Institute of Medical Science

Data presented at World Sleep conference

**NOVEL TARGET  
MECHANISMS WITH  
HUMAN VALIDATION**



**MODALITY  
DIVERSIFICATION**

**5** Accelerated programs

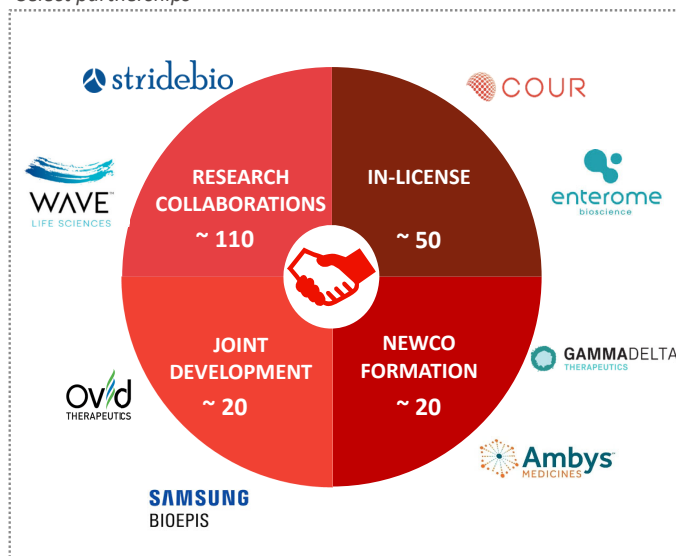
**20** NME stage-ups since FY18

**19** Indications terminated or externalized since FY18

**FAST GO / NO-GO  
DECISION MAKING**

## WE ARE CULTIVATING THE BEST SCIENCE THROUGH DIFFERENTIATED PARTNERSHIPS...

Select partnerships\*



\* Externalizations and venture investments are not included

Access to Innovation

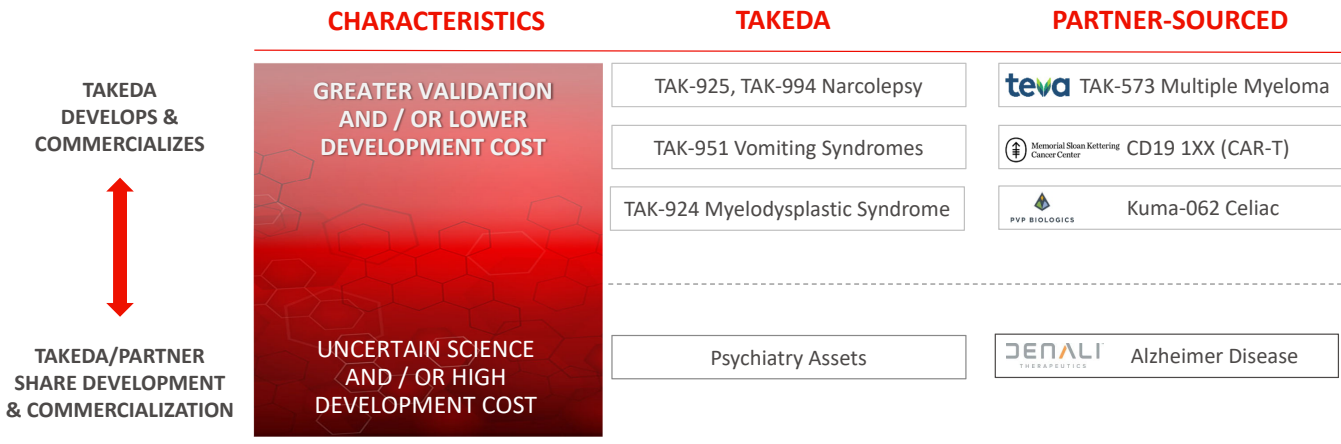
Risk-Sharing

Expanding Capacity

Total Value in Public & Private Equity

**>\$1B**




WE ARE NURTURING INNOVATION WHEREVER IT OCCURS



Representative examples only

TO DRIVE HIGHER RETURN ON OUR \$4.5B ANNUAL R&D INVESTMENT



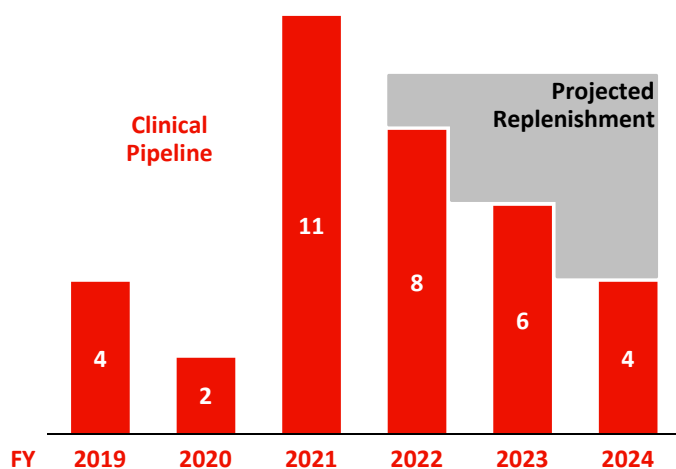
PRIORITIZED R&D PORTFOLIO		FLEXIBLE R&D FUNDING MODEL	
	<b>BALANCED SPEND</b>		<b>TARGETED POPULATIONS</b>
Minimize internal spend and infrastructure		Smaller trials, lower costs, potential longer exclusivity	
			<b>PARTNERSHIP MODEL</b>
		Success driven milestone payments	



## A RESEARCH ENGINE FUELING A SUSTAINABLE PIPELINE



### POTENTIAL NME PIVOTAL STUDY STARTS BY YEAR



### IMPROVED PRODUCTIVITY

- Research momentum building with a projected ~18 portfolio entries in FY19
- Productivity likely to increase with expansion of cell and gene therapy capabilities
- Leveraging partnerships to access the best clinical or preclinical innovation

## PIPELINE INVESTMENTS SUPPORTING NEAR-TERM GROWTH



### WAVE 1

INNOVATIVE EXPANSIONS

NEW MOLECULAR ENTITIES

# WE ARE DRIVING EXPANSION OF OUR GLOBAL BRANDS



## SELECT GLOBAL GROWTH BRANDS

TAU	Therapies	New Indications / Geographic Expansions	Target (FY)
<b>ONC</b>	<b>ALUNBRIG</b> BRIGATINIB	1L Non Small Cell Lung Cancer	2020
	<b>NINLARO</b> (ixazomib) capsules	ND MM Maintenance (non-SCT and post-SCT)	2020 / 2022
<b>Rare</b>	<b>TAKHZYRO</b> (lanadelumab-tyci) injection	Bradykinin Mediated Angioedema	2024
	<b>VONVENDI</b> *	Prophylactic Treatment of von Willebrand Disease	2021
<b>GI</b>	<b>Entyvio</b> vedolizumab	Ulcerative Colitis, Crohn's Disease (subcutaneous formulation)	2019 / 2020
		Graft versus Host Disease (prophylaxis)	2022
	<b>ALOFISEL</b>	Complex Perianal Fistulas	2021

## SELECT REGIONAL EXPANSIONS

Region	Therapies	Region	Therapies
<b>China</b>	<b>Entyvio</b> vedolizumab <b>ALUNBRIG</b> BRIGATINIB <b>TAKHZYRO</b> (lanadelumab-tyci) injection <b>VPRIV</b> velaglucerase alfa for injection <b>ADYNOVATE</b> [Antihemophilic Factor (Recombinant), PEGylated]	<b>Japan</b>	<b>Takecab</b> relugolix, cabozantinib, niraparib

ND MM: newly diagnosed multiple myeloma  
SCT: stem cell transplant

\* VONVENDI is emerging as a global brand  
Estimated dates as of November 14, 2019

# WAVE 1 NEW MOLECULAR ENTITIES HAVE POTENTIAL TO DELIVER >\$10B AGGREGATE PEAK SALES...



TARGET APPROVAL<sup>1</sup> → FY20 FY21 FY22 FY23 FY24

<b>ONCOLOGY</b>	<b>TAK-788<sup>2</sup></b> 2L NSCLC		<b>TAK-007</b> Hematologic malignancies		<b>TAK-924</b> AML	
	<b>TAK-924<sup>2</sup></b> HR-MDS		<b>TAK-788</b> 1L NSCLC			
<b>RARE DISEASES</b> Immunology Hematology Metabolic	<b>TAK-620</b> CMV infect. in transplant		<b>TAK-611</b> MLD (IT)		<b>TAK-607</b> Complications of prematurity	
	<b>TAK-609</b> Hunter CNS (IT)		<b>TAK-755</b> cTTP			
<b>NEUROSCIENCE</b>			<b>TAK-935</b> DEE		<b>Orexin2R-ag</b> (TAK-925/994) Narcolepsy T1	
<b>GASTRO-ENTEROLOGY</b>	<b>TAK-721</b> EoE					
<b>VACCINES</b>	<b>TAK-003</b> Dengue Vaccine					

14 potential NME launches which represent best-in-class or first-in-class therapies to advance patient standard of care

Peak sale estimate of >\$10B is non-risk adjusted

1. Projected timing of approvals depending on data read-outs; some of these Wave 1 target approval dates assume accelerated approval  
2. Projected approval date assumes filing on Phase 2 data

Orphan potential in at least one indication






Estimated dates as of November 14, 2019



## ...AND ARE EXPECTED TO DELIVER LIFE-CHANGING MEDICINES



### POTENTIAL FIRST-IN-CLASS OR BEST-IN-CLASS NMEs

				TARGET APPROVAL DATE (FY) <sup>1</sup>	ADDRESSABLE POPULATION (IN US) <sup>2</sup>	ADDRESSABLE POPULATION (WW) <sup>2,3</sup>
 ONCOLOGY	● TAK-788	EGFR inhibitor (exon 20)	NSCLC – 2L / 1L	2021 <sup>4</sup> / 2023	~2k	~20 - 30k
	● pevonedistat (TAK-924)	NAE inhibitor	HR-MDS / AML	2021 <sup>4</sup> / 2024	~7k / ~12k	15 - 20k / 20 - 25k
	TAK-007	CD19 CAR-NK	Hematologic malignancies	2023	~9k	~15 - 25k
 RARE DISEASES <i>Immunology Hematology Metabolic</i>	● TAK-609	ERT / I2S replacement	Hunter CNS (IT)	2021	~250	~1 - 1.5k
	● maribavir (TAK-620)	UL97 kinase inh	CMV infect. in transpl.	2021	~7 - 15k	~25 - 45k
	TAK-607	IGF-1/ IGFBP3	Complications of prematurity	2024 <sup>5</sup>	~25k	~80 - 90k
	TAK-611	ERT / arylsulfatase A	MLD (IT)	2023	~350	~1 - 2k
	● TAK-755	ERT/ ADAMTS-13	cTTP / iTTP	2023 / 2025	~500 / ~2k	2 - 6k / 5 - 18k
 NEUROSCIENCE	Orexin programs	Orexin 2R agonist	Narcolepsy Type 1	2024	70 - 140k	300k - 1.2M
	TAK-935	CH24H inhibitor	Developmental and Epileptic Encephalopathies (DEE)	2023	~50k	~70 - 90k
 GASTRO-ENTEROLOGY	● TAK-721	Oral anti-inflammatory	Eosinophilic Esophagitis	2020	~150k	<i>Under evaluation</i>
 VACCINES	● TAK-003	Vaccine	Dengue	2021	~32M	~1.8B

1. Projected timing of approvals depending on data read-outs; some of these target approval dates assume accelerated approval

2. Estimated number of patients projected to be eligible for treatment in markets where the product is anticipated to be commercialized, subject to regulatory approval

3. For TAK-788, TAK-924, TAK-007, TAK-607 and TAK-620 the addressable population represent annual incidence

4. Projected approval date assumes filing on Phase 2 data

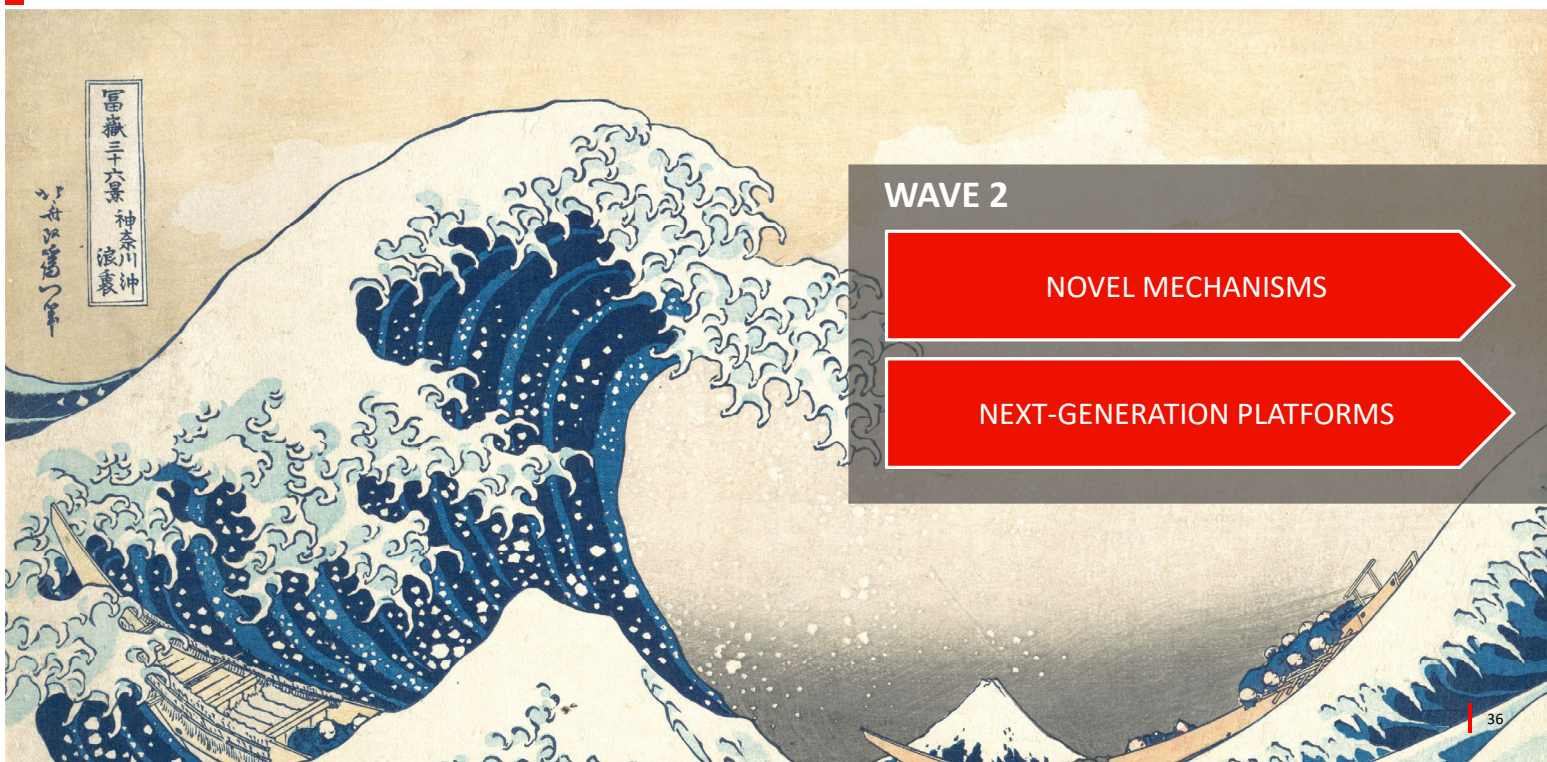
5. Currently in a non-pivotal Ph 2; interim stage gates may advance program into pivotal trial for target approval by 2024

● Currently in pivotal study or potential for registration enabling Ph-2 study (note: table excludes relugolix)

## IN SUMMARY: ROBUST NEAR-TERM GROWTH




# SUSTAINED GROWTH BEYOND FY25



## WAVE 2

NOVEL MECHANISMS






NEXT-GENERATION PLATFORMS

# DRIVEN BY A CLINICAL PIPELINE OF NOVEL MECHANISMS...



TARGET APPROVAL<sup>1</sup> →

FY25 AND BEYOND

 ONCOLOGY	TAK-164 <i>GI malignancies</i>	TAK-252 <i>Solid tumors</i>		
	TAK-573 <i>R/R MM</i>	TAK-981 <i>Multiple cancers</i>		
 RARE DISEASES <i>Immunology Hematology Metabolic</i>	TAK-079 <sup>2</sup> <i>MG, ITP</i>	TAK-754 <i>HemaA</i>	TAK-755 <i>iTTP, SCD</i>	
	TAK-531 <i>Hunter CNS</i>			
 NEUROSCIENCE	TAK-341 <i>Parkinson's Disease</i>	Orexin2R-ag <i>Sleep Disorders</i>	TAK-041 <i>CIAS NS</i>	
	TAK-418 <i>Kabuki Syndrome</i>	TAK-653 <i>TRD</i>	TAK-831 <i>CIAS NS</i>	
	WVE-120101 <i>Huntington's Disease</i>	WVE-120102 <i>Huntington's Disease</i>		
 GASTRO-ENTEROLOGY	Kuma062 <i>Celiac Disease</i>	TAK-101 <i>Celiac Disease</i>	TAK-018 <i>Crohn's Disease (post-op and ileitis)</i>	TAK-671 <i>Acute Pancreatitis</i>
	TAK-954 <i>POGD</i>	TAK-906 <i>Gastroparesis</i>	TAK-951 <i>Nausea &amp; vomiting</i>	
 VACCINES	TAK-214 <i>Norovirus Vaccine</i>	TAK-426 <i>Zika Vaccine</i>	TAK-021 <i>EV71 Vaccine</i>	

Rich early clinical pipeline of potentially transformative and curative NMEs

1. Some Wave 2 assets could be accelerated into Wave 1 if they have breakthrough data

2. TAK-079 to be developed in Rare Diseases indications myasthenia gravis (MG) and immune thrombocytopenic purpura (ITP) (FPI projected for 2H FY19)

Orphan potential in at least one indication

Estimated dates as of November 14, 2019



## ...AND WITH OUR NEXT-GENERATION PLATFORMS



TARGET APPROVAL →

FY25 AND BEYOND

<b>ONCOLOGY</b>	<b>CELL THERAPIES AND IMMUNE ENGAGERS</b> CAR-T <i>MSKCC, Nalle-Immune</i> T-CiRA, Takeda CAR-NK <i>MD Anderson</i> GammaDelta CAR-T <i>GammaDelta Tx</i> Conditional T cell engagers <i>Maverick</i>	<b>TARGETED INNATE IMMUNE MODULATION</b> Attenukine <i>Teva</i> STING <i>CuraDev, Takeda</i> SUMOylation <i>Takeda</i>	<b>NEXT-GEN CHECKPOINT MODULATORS</b> Agonist-redirected checkpoints <i>Shattuck</i> Humabodies <i>Crescendo</i>	<h3>Harnessing the potential of cell and gene therapies and other diverse modalities</h3>
<b>RARE DISEASES</b> <i>Immunology Hematology Metabolic</i>	<b>GENE THERAPY</b> Hemophilia Lysosomal Storage Diseases			
<b>NEUROSCIENCE</b>	<b>GENE THERAPY</b> Neurodegenerative Diseases <i>StrideBio</i>	<b>OTHER PLATFORMS</b> RNA Modulation <i>Wave, Skyhawk</i> Antibody Transport Vehicle <i>Denali</i>		
<b>GASTRO-ENTEROLOGY</b>	<b>GENE THERAPY</b> Liver <i>Ambys</i>	<b>MICROBIOME</b> FIN-524 <i>Finch</i> Microbial Consortia <i>NuBiyota</i>	<b>CELL THERAPY</b> <i>Ambys</i>	

Some Wave 2 assets could be accelerated into Wave 1 if they have breakthrough data

Estimated dates as of November 14, 2019

## INVESTING IN CAPABILITIES TO POSITION US FOR SUCCESS



<b>Cell Therapy</b>	<ul style="list-style-type: none"> <li>• 5 clinical programs by end of FY20</li> <li>• Disruptive platforms, including off-the-shelf cell-therapies</li> </ul>	
<b>Gene Therapy</b>	<ul style="list-style-type: none"> <li>• World-class gene therapy manufacturing</li> <li>• Accessing innovation through partnerships (e.g. Stridebio, Ambys)</li> </ul>	
<b>Data Sciences</b>	<ul style="list-style-type: none"> <li>• Accelerate clinical development with real world data (e.g. TAK-788)</li> <li>• Use machine learning to identify rare disease patients</li> </ul>	

## COMMITTED TO OUR PEOPLE



## LIVING OUR VALUES THROUGHOUT THE INTEGRATION PROCESS



誠実

INTEGRITY

公正

Fairness

正直

Honesty

不屈

Perseverance

**December 2018**  
Leadership Team and Proposed R&D  
Operating Model Announced

**April 2019**  
Prioritization of Combined  
Pipeline and Portfolio

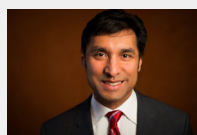
**August 2019**  
R&D Employees Informed  
of Employment Status\*



\* Where legally cleared



## STRONG LEADERSHIP EXECUTING ON OUR VISION



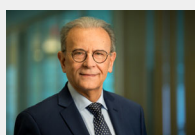
**ASIT PURI**  
Head, Gastroenterology  
Therapeutic Area Unit



**PHIL ROWLANDS**  
Head, Oncology  
Therapeutic Area Unit



**DAN CURRAN**  
Head, Rare Diseases  
Therapeutic Area Unit



**EMILIANGELO RATTI**  
Head, Neuroscience  
Therapeutic Area Unit



**SARAH SHEIKH**  
Head, Neuroscience  
Therapeutic Area Unit\*

 **New hire**

\*Sarah Sheikh to succeed Emiliangelo Ratti upon his retirement beginning November 25

\*includes Regulatory, Global Patient Safety Evaluation, Development Operations, and Clinical Supply Chain



**STEVE HITCHCOCK**  
Head, Research



**NENAD GRMUSA**  
Head, Center for  
External Innovation



**GEORGIA KERESTY**  
R&D Chief Operating Officer



**ANNE HEATHERINGTON**  
Head, Data Sciences Institute



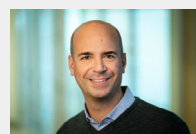
**WOLFRAM NOTHAFT**  
Chief Medical Officer



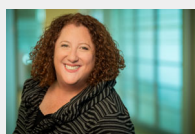
**STEFAN WILDT**  
Head, Pharmaceutical Sciences  
and Translational Engine, Cell  
Therapies



**JEREMY CHADWICK**  
Head, Global Development  
Office†



**WOLFGANG HACKEL**  
Head, Global R&D Finance



**ERIKA MARDER**  
Head, Global R&D Human  
Resources



**COLLEEN BEAUREGARD**  
Head, Global R&D  
Communications



**TOSHIO FUJIMOTO**  
General Manager, Shonan  
Health Innovation Park (iPark)

## OUR COMMITMENT TO OUR PEOPLE IS BEING RECOGNIZED



BOSTON BUSINESS JOURNAL



2019 BEST PLACES TO WORK








**CEO CANCER  
GOLD STANDARD**



# WE ARE POSITIONED TO DELIVER NEAR-TERM & SUSTAINED GROWTH



TARGET APPROVAL	WAVE 1 <sup>1</sup>					WAVE 2 <sup>2</sup>							
	CLINICAL-STAGE NMEs					PLATFORMS							
	FY20	FY21	FY22	FY23	FY24	FY25 AND BEYOND							
 ONCOLOGY		TAK-788 <sup>3</sup> 2L NSCLC		TAK-007 Hematologic malignancies	TAK-924 AML	TAK-164 GI malignancies	TAK-252 Solid tumors				CELL THERAPY AND IMMUNE ENGAGERS	TARGETED INNATE IMMUNE MODULATION	NEXT-GEN CHECKPOINT MODULATORS
		TAK-924 <sup>3</sup> HR-MDS		TAK-788 1L NSCLC		TAK-573 R/R MM	TAK-981 Multiple cancers						
 RARE DISEASES <i>Immunology Hematology Metabolic</i>		TAK-620 CMV infect. in transplant		TAK-611 MLD (IT)	TAK-607 Complications of prematurity	TAK-079 <sup>4</sup> MG, ITP	TAK-754 HemA	TAK-755 iTTP, SCD			GENE THERAPY		
		TAK-609 Hunter CNS (IT)		TAK-755 cTTP		TAK-531 Hunter CNS							
 NEUROSCIENCE				TAK-935 DEE	Orexin2R-ag (TAK-925/994) Narcolepsy T1	TAK-341 Parkinson's Disease	Orexin2R-ag Sleep Disorders	TAK-041 CIAS NS			GENE THERAPY	OTHER PLATFORMS RNA Modulation Antibody Transport Vehicle	
						TAK-418 Kabuki Syndrome	TAK-653 TRD	TAK-831 CIAS NS					
						WVE-120101 Huntington's Disease	WVE-120102 Huntington's Disease						
 GASTRO-ENTEROLOGY	TAK-721 EoE					Kuma062 Celiac Disease	TAK-101 Celiac Disease	TAK-018 Crohn's Disease (post-op and ileitis)	TAK-671 Acute Pancreatitis		GENE THERAPY	MICROBIOME	CELL THERAPY
						TAK-954 POGD	TAK-906 Gastroparesis	TAK-951 Nausea & vomiting					
 VACCINES		TAK-003 Dengue Vaccine				TAK-214 Norovirus Vaccine	TAK-426 Zika Vaccine	TAK-021 EV71 vaccine					

1. Projected timing of approvals depending on data read-outs; some of these Wave 1 target approval dates assume accelerated approval

2. Some Wave 2 assets could be accelerated into Wave 1 if they have breakthrough data

3. Projected approval date assumes filing on Phase 2 data

4. TAK-079 to be developed in Rare Diseases indications myasthenia gravis (MG) and immune thrombocytopenic purpura (ITP) (FPI projected in each indication in 2H FY19)

Orphan potential in at least one indication  
Estimated dates as of November 14, 2019

## R&D DAY AGENDA – NEW YORK, NOVEMBER 14, 2019



TIME	AGENDA
12:30 – 12:35	<b>Welcome and Opening Remarks</b> <i>Sheelagh Cawley-Knopf, Head R&amp;D Global Portfolio Strategy</i>
12:35 – 12:45	<b>Takeda: A Global Values-Based, R&amp;D-Driven Biopharmaceutical Leader</b> <i>Christophe Weber, President &amp; CEO Takeda</i>
12:45 – 13:20	<b>Translating Science into Highly Innovative, Life-changing Medicines</b> <i>Andy Plump, President R&amp;D</i>
13:20 – 13:45	<b>Oncology and Cell Therapies with Spotlight on CAR-NK</b> <i>Chris Arendt, Head Oncology Drug Discovery Unit</i>
13:45 – 14:05	<b>Spotlight on Oncology Opportunities</b> <ul style="list-style-type: none"> <li>• <b>TAK-788</b> : Rachael Brake, Global Program Lead</li> <li>• <b>Pevonedistat</b> : Phil Rowlands, Head Oncology Therapeutic Area Unit</li> </ul>
14:05 – 14:20	<b>Break</b>
14:20 – 14:45	<b>Rare Diseases &amp; Gene Therapy</b> <i>Dan Curran, Head Rare Disease Therapeutic Area Unit</i>
14:45 – 15:00	<b>Spotlight on Orexin2R agonists</b> <i>Deborah Hartman, Global Program Lead</i>
15:00 – 15:20	<b>Therapeutic Area Focus in GI with Spotlight on Celiac Disease</b> <i>Asit Parikh, Head GI Therapeutic Area Unit</i>
15:20 – 16:00	<b>Panel Q&amp;A Session</b>
16:00	<b>Drinks reception</b>