



# Strategic Focus & Superior Execution

## FY2018 Q2 Results



October 31, 2018

**Christophe Weber**  
Chief Executive Officer

**Costa Saroukos**  
Chief Financial Officer

**Andy Plump**  
Chief Medical & Scientific Officer

**Masato Iwasaki**  
President, Japan Pharma Business Unit

Better Health, Brighter Future

## Important Notice

For the purposes of this notice, "presentation" means this document, any oral presentation, any question and answer session and any written or oral material discussed or distributed by Takeda Pharmaceutical Company Limited ("Takeda") during the presentation. This presentation (including any oral briefing and any question-and-answer in connection with it) is not intended to, and does not constitute, represent or form part of any offer, invitation or solicitation of any offer to purchase, otherwise acquire, subscribe for, exchange, sell or otherwise dispose of, any securities or the solicitation of any vote or approval in any jurisdiction. No shares are being offered to the public by means of this presentation. This presentation is being given (together with any further information which may be provided to the recipient) on the condition that it is for use by the recipient for information purposes only (and not for the evaluation of any investment, acquisition, disposal or any other transaction). Any failure to comply with these restrictions may constitute a violation of applicable securities laws.

Unless specified otherwise, no statement in this presentation (including any statement of estimated synergies) is intended as a profit forecast or estimate for any period and no statement in this presentation should be interpreted to mean that earnings or earnings per share for Takeda for the current or future financial years would necessarily match or exceed the historical published earnings per share for Takeda.

The companies in which Takeda directly and indirectly owns investments are separate entities. In this presentation, "Takeda" is sometimes used for convenience where references are made to Takeda and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to subsidiaries in general or to those who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies.

### Forward-Looking Statements

This presentation and any materials distributed in connection with this presentation may contain forward-looking statements, beliefs or opinions regarding Takeda's future business, future position and results of operations, including estimates, forecasts, targets and plans for Takeda. In particular, this presentation contains forecasts and management estimates related to the financial and operational performance of Takeda, including statements regarding forecasts for FY2018 revenue, Core Earnings, Operating profit, Profit before income taxes, Net profit attributable to owners of Takeda, Basic earnings per share, R&D expenses, Amortisation and impairment and other income/expense, Underlying Revenue, Underlying Core Earnings and Underlying Core EPS. Without limitation, forward looking statements often include the words such as "targets", "plans", "believes", "hopes", "continues", "expects", "aims", "intends", "will", "may", "should", "would", "could", "anticipates", "estimates", "projects" or words or terms of similar substance or the negative thereof. Any forward-looking statements in this document are based on the current assumptions and beliefs of Takeda in light of the information currently available to it. Such forward-looking statements do not represent any guarantee by Takeda or its management of future performance and involve known and unknown risks, uncertainties and other factors, including but not limited to: the economic circumstances surrounding Takeda's business, including general economic conditions in Japan, the United States and worldwide; competitive pressures and developments; applicable laws and regulations; the success of or failure of product development programs; decisions of regulatory authorities and the timing thereof; changes in exchange rates; claims or concerns regarding the safety or efficacy of marketed products or products candidates; and post-merger integration with acquired companies, any of which may cause Takeda's actual results, performance, achievements or financial position to be materially different from any future results, performance, achievements or financial position expressed or implied by such forward-looking statements. Neither Takeda nor its management gives any assurances that the expectations expressed in these forward-looking statements will turn out to be correct, and actual results, performance or achievements could materially differ from expectations. Persons receiving this presentation should not place undue reliance on forward looking statements. Takeda undertakes no obligation to update any of the forward-looking statements contained in this presentation or any other forward-looking statements it may make. Past performance is not an indicator of future results and the results of Takeda in this presentation may not be indicative of, and are not an estimate, forecast or projection of Takeda's future results.

### Medical information

This presentation contains information about products that may not be available in all countries, or may be available under different trademarks, for different indications, in different dosages, or in different strengths. Nothing contained herein should be considered a solicitation, promotion or advertisement for any prescription drugs including the ones under development.

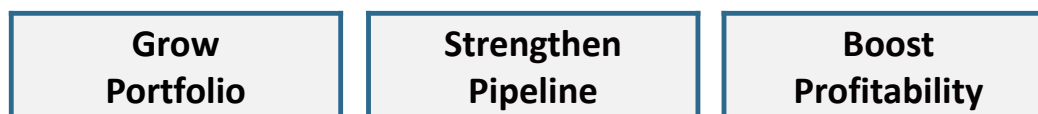
### Profit Forecast for Takeda for the year ending March 31, 2019

Takeda is currently in an offer period (as defined in the City Code on Takeovers and Mergers (the "Code")) with respect to Shire plc. Pursuant to Rule 28 of the Code, statements made regarding Takeda's guidance for FY2018 (including statements regarding forecasts for FY2018 revenue, Core Earnings, Operating profit, Profit before income taxes, Net profit attributable to owners of Takeda, Basic earnings per share, R&D expenses, Amortisation and impairment and other income/expense, Underlying Revenue, Underlying Core Earnings and Underlying Core EPS) constitute a profit forecast for the year ending March 31, 2019 (the "Takeda Profit Forecast").

For additional information regarding the Takeda Profit Forecast and the required statement by its Directors that such profit forecast is valid and has been properly compiled on the basis of the assumptions stated and that the basis of accounting used is consistent with Takeda's accounting policies, please see page 9 of Takeda's Summary of Financial Statements (Tanshin) for the Six Months Period Ended September 30, 2018.

## Strategic Focus & Superior Execution is driving robust H1 performance

- Continued to deliver against our key strategic priorities to:



- Strong underlying growth driven by business momentum and strict OPEX discipline**  
*Revenue +4.2%; Core Earnings +31.8%; Core EPS +32.7%*  
*Underlying Core Earnings margin expansion +510bps*
- Reported results impacted by divestitures and Shire related costs**  
*Revenue -0.1%; Operating Profit -26.6%; EPS -26.9%*
- Raising full year outlook on VELCADE upside, Growth Driver momentum & OPEX discipline**
- Proposed acquisition of Shire on track; integration planning is well underway**

3

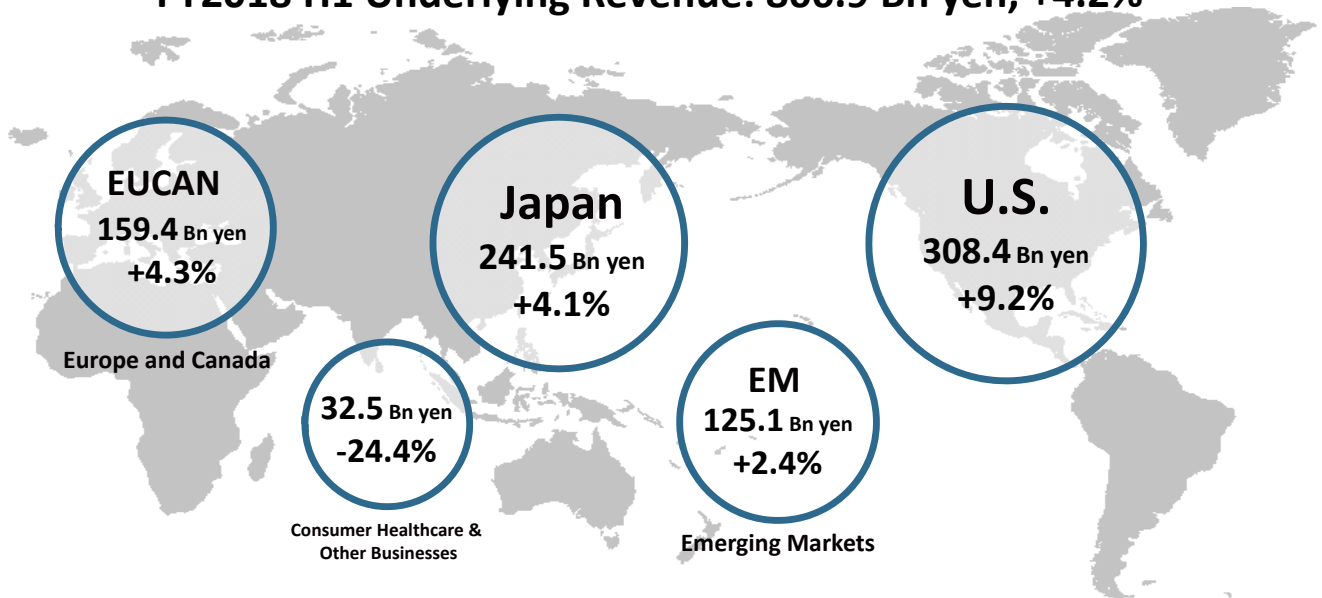
## Continued to deliver against our key strategic priorities in H1

<b>Grow Portfolio</b>	<ul style="list-style-type: none"> <li>Underlying Revenue +4.2% with growth in every region, led by Growth Drivers +9.8%</li> <li>Strong performance from key growth products (e.g. ENTYVIO +33.1%; NINLARO +38.0%)</li> <li>Completed acquisition of TiGenix; proposed acquisition of Shire on track</li> <li>Completed divestiture of non-core businesses Multilab in Brazil and Techpool in China</li> </ul>
<b>Strengthen Pipeline</b>	<ul style="list-style-type: none"> <li>ALUNBRIG first line ALK+ NSCLC (ALTA-1L study) first interim data presented at WCLC; met primary endpoint of superiority in PFS compared to crizotinib (HR = 0.49)</li> <li>ADECETRIS frontline CD30+ PTCL (ECHELON-2 study) met primary endpoint of improvement in PFS (HR = 0.71), and all key secondary endpoints including OS improvement (HR = 0.66)</li> <li>7 New Molecular Entities entered Phase 1 of the pipeline since April 2018</li> </ul>
<b>Boost Profitability</b>	<ul style="list-style-type: none"> <li>Global OPEX Initiative fully integrated into how we work (KPIs, incentives, budgets, systems)</li> <li>Underlying CE growth +31.8%</li> <li>CE margin +510bps, of which two-thirds is driven by OPEX improvements</li> <li>Underlying Core EPS +32.7%</li> <li>Raising full year outlook on VELCADE upside, Growth Driver momentum &amp; OPEX discipline</li> </ul>

4

## Underlying revenue growth in all regions

FY2018 H1 Underlying Revenue: 866.9 Bn yen, +4.2%



5

## Growth Drivers posted strong +9.8% revenue growth








FY2018 H1 Underlying Revenue growth	
Growth Drivers	GI +18.7%
	Oncology +6.8%
	Neuroscience +15.6%
	Emerging Markets +2.4%
	<b>Total + 9.8%</b>

Growth Drivers now 63% of total Takeda revenue

6

# Strong performance from key growth products in FY2018 H1

## Underlying Revenue Bn yen vs. PY

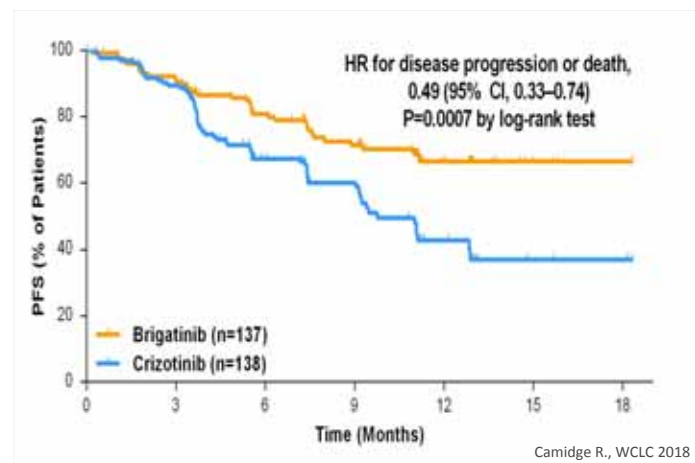
		Bn yen	vs. PY	
GI		125.2	+33.1%	<ul style="list-style-type: none"> <li>Continues to expand in bio-naive setting; bio-naive share in the U.S. now 24.9% in UC, 13.6% in CD</li> <li>On track towards achieving \$3bn MAT revenue within FY2019</li> </ul>
		27.2	+22.1%	<ul style="list-style-type: none"> <li>Robust Japan growth driven by prescription volume, more than offsetting 16.1% price cut in April</li> <li>NDA submitted in several emerging markets, including China &amp; Brazil</li> </ul>
Oncology		28.5	+38.0%	<ul style="list-style-type: none"> <li>Approved in more than 60 countries, continued global rollout</li> <li>Post-SCT MM maintenance study met primary endpoint; data to be presented at ASH</li> </ul>
		21.9	+15.7%	<ul style="list-style-type: none"> <li>Strong growth due to a range of markets performing well</li> <li>Frontline Hodgkin lymphoma approved in Japan; submission under review in EU</li> </ul>
		13.6	+32.6%	<ul style="list-style-type: none"> <li>Growth in the U.S. supported by Takeda's strong legacy in hematological malignancies</li> <li>Inclusion in NCCN guidelines for Ph+ ALL induction therapy; Phase 3 study initiated in this indication</li> </ul>
		2.2	+179.1% (Launched May 2017)	<ul style="list-style-type: none"> <li>Expanding U.S. information activities to further penetrate market in approved post-crizotinib setting</li> <li>Positive CHMP opinion for post-crizotinib ALK+ NSCLC; EU launch preparations ongoing</li> </ul>
Neuro-science		26.0	+17.5%	<ul style="list-style-type: none"> <li>FDA approved sNDA: new data added to labeling demonstrating superiority over escitalopram in improving Treatment Emergent Sexual Dysfunction in patients with MDD</li> <li>NDA submitted in Japan for the treatment of MDD in adults, incl. positive data from Japan P-3 study</li> </ul>

UC: Ulcerative colitis; CD: Crohn's disease; MAT: Moving Annual Total; NDA: New Drug Application; SCT: Stem Cell Transplant; ASH: American Society of Hematology; Ph+ALL: Philadelphia Chromosome-positive Acute Lymphoblastic Leukemia; NCCN: National Comprehensive Cancer Network; NSCLC: Non Small Cell Lung Cancer; MDD: Major Depressive Disorder

7

# ALUNBRIG ALTA-1L confirms promising best-in-class profile established in the 2<sup>nd</sup> line

- Best-in-class efficacy in 2<sup>nd</sup> line post-crizotinib established**
  - Longest reported systemic median PFS: 16.7 months
  - Longest reported CNS median PFS: 18.4 months
  - Longest reported overall survival: 34 months
- Superior efficacy as demonstrated at the 1<sup>st</sup> interim analysis of ALTA-1L by IRC despite short follow-up (11 months; 99 events in 275 patients)**
  - Overall 51% reduction in risk of disease progression or death
    - HR = 0.49 (95% CI: 0.33 to 0.74, p=0.0007)
  - 80% reduction in risk of disease progression or death in patients with brain metastases at baseline
    - HR = 0.20 (95% CI: 0.09 to 0.46, p<0.0001)
  - Improvement in efficacy over crizotinib is exhibited rapidly, with PFS curves clearly separating at around 3 months
  - Efficacy profile expected to improve with longer follow-up based on experience in other studies
- Improvement seen in safety profile in ALTA-1L vs. the 2<sup>nd</sup> line experience**
  - Decrease in rate of early onset pulmonary events from 6% to 3% likely due to no interaction with prior ALK inhibitors
  - Rate of other adverse events at 1<sup>st</sup> IA generally consistent with U.S.P.I.
- Most convenient dosing regimen to improve patient compliance**
  - Only FDA-approved ALK-inhibitor with a one-tablet, once-daily dose that can be taken with or without food.



PFS: Progression Free Survival; HR: Hazard Ratio; CI: Confidence Interval

8

## Important R&D milestones expected in FY2018

Therapeutic Area	Compound	Expected Event	
Oncology	ADCETRIS	Front-Line Hodgkin's Lymphoma EU approval decision (H2)	
		Front-Line Hodgkin's Lymphoma Japan approval decision (H2)	✓
	ALUNBRIG	ALTA-1L Front-line ALK+ NSCLC 1 <sup>st</sup> Interim Analysis (H1)	✓
		2nd-line ALK+ NSCLC EU approval decision (H2)	
	Cabozantinib	Hepatocellular carcinoma Japan pivotal study start (H2)	✓
	ICLUSIG	Ph+ Acute Lymphoblastic Leukemia Global pivotal study start (H1)	✓
	NINLARO	Newly Diagnosed Multiple Myeloma 1 <sup>st</sup> Interim Analysis (H1)	✓
Multiple Myeloma Maintenance Post-Transplant 1 <sup>st</sup> Interim Analysis (H1)		✓	
Pevedinostat	HR-MDS/CMML/LB AML Ph-2 final analysis (H2)	→	Move final analysis to FY2019 with potential filing from ongoing Phase 2 study
TAK-788	First patient dosed in registration enabling Ph-2 NSCLC study (H2)		
Gastroenterology	ENTYVIO	Crohn's Disease Japan submission (H1)	✓
		Ulcerative Colitis Japan approval decision (H1)	✓
		Subcutaneous administration Ulcerative Colitis submission (H2)	○
	TAK-954	Enteral Feeding Intolerance Ph-2b study initiation (H1)	✓
	Post-operative Ileus Ph-2b initiation (H2)		
TAK-906	Gastroparesis Ph-2b initiation (H2)		
Neuroscience	TRINTELLIX	Major Depressive Disorder Japan submission (H2)	✓
		TESD U.S. label update approval decision (H2)	✓
	TAK-925	Proof of concept in narcolepsy patients (H2)	
Vaccines	TAK-003	Dengue Virus Vaccine Ph-3 primary analysis (H2)	
	TAK-214	Norovirus Vaccine Ph-2b final analysis (in adults) (H1)	✓

Table only shows select R&D milestones, and is not comprehensive. All timelines are current assumptions and subject to change.  
BLA: Biologics Licensing Application; MAA: Marketing Authorisation Application.  
For full glossary of disease abbreviations please refer to appendix.

9

## Strong H1 underlying performance; reported EPS impacted by large one-time gains in FY2017 and Shire related costs in FY2018

- **Reported EPS decreased -26.9% impacted by divestitures and Shire related costs**
  - Revenue -0.1% with FX (-1.0pp) & divestitures (-3.2pp) offsetting strong Growth Drivers
  - Operating profit -26.6%, primarily impacted by two large one-time gains in FY2017\* and Shire related costs in FY2018; excluding these items Operating profit grew +64.5%
  - \*106.3 Bn yen one-time gain on sale of Wako and 16.8 Bn yen from additional products sold to Teva JV
- **Core EPS increased +32.7% driven by business momentum and strict OPEX discipline**
  - Underlying revenue +4.2% led by Growth Drivers +9.8%
  - Underlying CE growth +31.8%, with margin +510bps, of which two-thirds is driven by OPEX improvements
- **Operating FCF down -29.7% due to cash impact of products sold to Teva JV in FY2017**

FY2018 H1 year-on-year growth

Reported		excl. FY18 H1 Shire related costs	excl. FY17 H1 gains on Wako & Teva JV and FY18 H1 Shire related costs	Underlying	
Revenue	-0.1%	-0.1%	+1.9%	Revenue	+4.2%
Operating Profit	-26.6%	-21.9%	+64.5%	Core Earnings	+31.8%
EPS	-26.9%	-17.4%	+64.2%	Core EPS	+32.7%

10

## H1 Reported P&L reflects large one-time gains in FY2017 and Shire related costs in FY2018

### Reported P&L – FY2018 H1

(Bn yen)	<u>FY2017 H1</u>	<u>FY2018 H1</u> <u>Incl. Shire</u> <u>related costs</u>	<u>vs. PY</u>	<u>Shire</u> <u>related</u> <u>costs</u>	<u>FY2018 H1</u> <u>Excl. Shire</u> <u>related costs</u>	<u>vs. PY</u>
Revenue	881.4	880.6	-0.1%	-	880.6	-0.1%
Core Earnings	187.1	212.0	+13.3%	-	212.0	+13.3%
Operating Profit	234.3	172.0	-26.6%	-11.1	183.0	-21.9%
Net Profit	172.8	126.7	-26.7%	-16.5	143.1	-17.2%
EPS	221 yen	162 yen	-26.9%	-21 yen	183 yen	-17.4%
JPY/USD	111 yen	110 yen	-1.5%		110 yen	-1.5%
JPY/EUR	126 yen	130 yen	+3.2%		130 yen	+3.2%

11

## H1 Underlying P&L reflects strong business momentum and strict OPEX discipline

### Underlying P&L – FY2018 H1

(Bn yen)	<u>FY2017 H1</u>	<u>FY2018 H1</u>	<u>vs. PY</u>
Revenue	832.3	866.9	+4.2%
Gross Profit	597.3	638.2	+6.8%
% of revenue	71.8%	73.6%	+1.9pp
OPEX	-436.5	-426.2	-2.4%
% of revenue	-52.4%	-49.2%	+3.3pp
Core Earnings	160.8	212.0	+31.8%
% of revenue	19.3%	24.5%	+5.1pp
Core Net Profit	126.1	167.3	+32.7%
Core EPS	161 yen	214 yen	+32.7%

12

## Operating Free Cash Flow -29.7% due to impact of additional Long-Listed Products sold to Teva JV in FY2017

### Cash Flow Statement – FY2018 H1

(Bn yen)	FY2017 H1	FY2018 H1	vs. PY	
Net profit	172.7	126.5	-46.2	-26.7%
Depreciation, amortization and impairment loss	84.2	78.7	-5.5	
Decrease (increase) in trade working capital	-45.6	-66.4	-20.8	
Income taxes paid	-3.9	-18.8	-15.0	
Other*	-56.6	-2.0	+54.6	
<b>Net cash from operating activities</b>	<b>150.8</b>	<b>117.8</b>	<b>-32.9</b>	<b>-21.9%</b>
Acquisition of tangible assets (net)**	-36.0	-37.3	-1.4	
Acquisition of intangible assets***	-30.3	-21.1	+9.2	
<b>Operating Free Cash Flow</b>	<b>84.6</b>	<b>59.4</b>	<b>-25.1</b>	<b>-29.7%</b>

- Sale of real estate and marketable securities generated an additional 44.2 Bn yen
- Sale of non-core businesses Techpool and Multilab generated an additional 27.2 Bn yen
- Net debt/EBITDA of 1.7x in FY2018 Q2, improved from 1.8x in FY2017 Q4 and 2.7x in FY2016 Q4

The following items have been excluded from the above cash flow statement:

\* (FY2017 H1) 16.2 Bn yen of cash benefit with a payment from escrow regarding the Unipharm transaction (offset by an outflow entry in "investing activities").

\*\* (FY2017 H1) 31.9 Bn yen proceeds from sales of TS Tower, a building in Shinagawa, Tokyo.

(FY2018 H1) 6.0 Bn yen proceeds from sales of land and facilities, mainly in Juso, Osaka.

\*\*\* (FY2017 H1) Payment of 16.6 Bn yen to buy back future royalties.

13




## Global Opex Initiative fully integrated into how we work

- Total underlying OPEX spend reduced by 2.4% vs. prior year, trending ahead of plan
- OPEX savings contributed two thirds of the improvement in underlying Core Earnings margin (330bps of the 510bps)
- Zero Based Budgeting ("ZBB") for cost packages ahead of plan by 6.7%
- Embedded OPEX targets into KPIs and incentives of all management

14

## FY2018 Full Year Reported Forecast upgraded based on VELCADE upside, Growth Driver momentum & OPEX discipline

Excluding Shire related costs

	FY2018 Full Year Forecast (Bn yen, growth % vs. PY)			
	Previous Forecast May 14, 2018		Revised Forecast Oct 31, 2018	
Revenue	1,737.0	-1.9%	 1,750.0	-1.2%
Operating Profit	201.0	-16.9%	 280.0	+15.8%
EPS	178 yen	-25.7%	 263 yen	+9.8%
Annual dividend per share	180 yen		180 yen	

- This Reported Forecast excludes the full fiscal year 2018 estimated financial impact related to the proposed acquisition of Shire plc by Takeda including already incurred H1 expenses (profit before tax impact: 19.8 Bn yen, net profit impact: 16.5 Bn yen). Also, this forecast does not include possible additional future earnings from Shire if deal close were to occur within the fiscal year.
- The portion of Shire related expenses to be incurred by Takeda in FY2018 are estimated to be between 40 Bn yen and 60 Bn yen. This does not include integration costs, debt interest and other financial expenses as the magnitude of the FY2018 impact from these items will be dependent on the timing of deal closing.

15

## FY2018 Full Year Revised Reported Forecast vs. FY2017

Excluding Shire related costs

FY2018 Full Year Revised Forecast vs. FY2017 Actual

(Bn yen)	FY2017 Actual Results	FY2018 Revised Forecast	vs. PY	
Revenue	1,770.5	1,750.0	-20.5	-1.2%
R&D expenses	-325.4	-320.0	+5.4	-1.7%
Core Earnings	322.5	330.0	+7.5	+2.3%
Amortization & impairment	-122.1	-108.0	+14.1	-11.6%
Other income/expense	41.4	58.0	+16.6	+40.0%
Operating profit	241.8	280.0	+38.2	+15.8%
Profit before tax	217.2	265.0	+47.8	+22.0%
Net profit	186.9	206.0	+19.1	+10.2%
EPS	239 yen	263 yen	+24 yen	+9.8%
USD/JPY	111 yen	110 yen	-1 yen	-1.0%
EUR/JPY	129 yen	130 yen	+1 yen	+0.5%

Revised Impact of FX and divestitures on growth

Revenue -1.2%	
• FX	~-1.6pp
• Divestitures	~-3.0pp
Core Earnings +2.3%	
• FX	~-5.0pp
• Divestitures	~-8.0pp

Revised Key FY2018 Items (Bn yen)

	FY2017	FY2018
Amortization	-126.1	-96.0
Impairment	4.0	-12.0
Other income	169.4	108.0
• Sale of Wako shares	106.3	-
• Sale of real estate	18.8	80.0
• LLP transfer gain	27.5	4.5
• Techpool gain	-	18.4
Other expense	-126.6	-50.0
• Restructuring	-44.7	-28.0
• Currency Translation Adjustment	-41.7	-

This Reported Forecast excludes the full fiscal year 2018 estimated financial impact related to the proposed acquisition of Shire plc by Takeda.

16



# FY2018 Full Year Revised Reported Forecast vs. Previous Forecast

Excluding Shire related costs

FY2018 Full Year Revised Forecast vs. Previous Forecast

(Bn yen)	Previous Forecast May 14, 2018	Revised Forecast Oct 31, 2018	Change	
Revenue	1,737.0	1,750.0	+13.0	+0.7%
R&D expenses	-311.0	-320.0	-9.0	+2.9%
Core Earnings	309.5	330.0	+20.5	+6.6%
Amortization & impairment	-108.0	-108.0	-	-
Other income/expense	-0.5	58.0	+58.5	NA
Operating profit	201.0	280.0	+79.0	+39.3%
Profit before tax	183.0	265.0	+82.0	+44.8%
Net profit	139.0	206.0	+67.0	+48.2%
EPS	178 yen	263 yen	+85 yen	+47.7%
USD/JPY	108 yen	110 yen	+2 yen	+1.5%
EUR/JPY	133 yen	130 yen	-3 yen	-2.3%

- Velcade upside +35.5 Bn yen, Growth Driver momentum
- Techpool divestiture -15.8 Bn yen
- FX -13.5 Bn yen
- Velcade upside, Growth Driver momentum & OPEX discipline
- R&D expenses increasing -9.0 Bn yen
- FX -4.5 Bn yen
- Higher value for real estate disposals +24.5 Bn yen
- Techpool gain +18.4 Bn yen
- Lower restructuring costs +12.5 Bn yen
- Tax rate favorable by 1.8pp due to earnings mix and partial release of uncertain tax provision



This Reported Forecast excludes the full fiscal year 2018 estimated financial impact related to the proposed acquisition of Shire plc by Takeda.

17

# FY2018 Full Year Underlying Guidance upgraded

Excluding Shire related costs

FY2018 Full Year Guidance (growth % vs. PY)

	FY2018 Full Year Guidance (growth % vs. PY)	
	Previous Guidance May 14, 2018	Revised Guidance Oct 31, 2018
Underlying Revenue	Low single digit	Low single digit
Underlying Core Earnings	High single digit	 High teen
Underlying Core EPS	Low teens	 Mid twenties

- Guidance assumes one additional therapeutically non-equivalent competitor to Velcade with IV and SC administration launching in the U.S. in March 2019, an upside of 35.5 Bn yen from the previous guidance. [Global revenue: FY17 129.6 Bn yen; FY18 111.0 Bn yen]\*
- Underlying CE margin at the higher end of +100-200bps range
- This Underlying Guidance excludes the full fiscal year 2018 estimated financial impact related to the proposed acquisition of Shire plc by Takeda. Also, this guidance does not include possible additional future earnings from Shire if deal close were to occur within the fiscal year.

\* Applying constant currency based on FY2018 plan rate  
IV: intravenous, SC: subcutaneous

18

## Takeda Transformation is driving robust H1 performance

- **Continued to deliver against our key strategic priorities to Grow Portfolio, Strengthen Pipeline and Boost Profitability**
- **Strong underlying growth driven by business momentum and strict OPEX discipline**  
*Revenue +4.2%; Core Earnings +31.8%; Core EPS +32.7%*  
*Underlying Core Earnings margin expansion +510bps*
- **Reported results impacted by divestitures and Shire related costs**  
*Revenue -0.1%; Operating Profit -26.6%; EPS -26.9%*  
*Operating Profit excl. FY17 H1 Wako & Teva JV gains and FY18 H1 Shire related costs +64.5%*
- **Raising full year outlook on VELCADE upside, Growth Driver momentum & OPEX discipline**
- **Proposed acquisition of Shire on track; integration planning is well underway**

19

## Solid execution laying the foundation for the Shire acquisition and integration

- **Continue to boost profitability and deliver solid fundamentals**
  - Executing and improving the Global Opex Initiative
  - Committed to 100-200bps/year underlying Core Earnings margin improvement
- **Maintain investment grade credit rating**
  - Focus on quick de-leveraging
  - Disposal of non-core assets
- **Intend to maintain well-established dividend policy**
  - 180 JPY per share annually

20

# APPENDIX



## Definition of Core and Underlying Growth

Takeda uses the concept of “**Underlying Growth**” for internal planning and performance evaluation purposes.

Underlying Growth compares two periods (quarters or years) of financial results under a common basis and is used by management to assess the business. These financial results are calculated based on constant currency basis and excluding the impacts of divestitures and other amounts that are unusual, non-recurring items or unrelated to our ongoing operations. Although this is not a measure defined by IFRS, Takeda believes Underlying Growth is useful to investors as it provides a consistent measure of our performance.

Takeda uses “**Underlying Revenue Growth**”, “**Underlying Core Earnings Growth**”, and “**Underlying Core EPS Growth**” as key financial metrics.

**Underlying Revenue** represents revenue on a constant currency basis and excluding non-recurring items and the impacts of divestitures occurred during the reporting periods presented.

Core Earnings represents Operating Profit adjusted to exclude amortization and impairment losses on intangible assets associated with products as well as other operating income, other operating expenses and certain other significant items that are unusual, non-recurring or unrelated to its ongoing operations. These items include but are not limited to, purchase accounting effects, major litigation costs, integration costs, the impact of natural disasters, and certain government actions.

**Underlying Core Earnings** represents Core Earnings based on a constant currency basis and further adjusted to exclude the impacts of divestitures occurred during the reporting periods presented.

**Underlying Core EPS** represents net income based on a constant currency basis, adjusted to exclude the impact of divestitures, items excluded in the calculation of Core Earnings and other non-operating items (e.g. amongst other items, fair value adjustments and the imputed financial charge related to contingent consideration) that are unusual, non-recurring in nature or unrelated to its ongoing operations and the tax effect of each of the adjustments, divided by the outstanding shares (excluding treasury shares) as of the end of the comparative period.

## Underlying revenue of Growth Drivers

(Bn yen)	FY2017 H1	FY2018 H1	vs. PY	
ENTYVIO	94.0	125.2	+31.2	+33.1%
TAKECAB	22.3	27.2	+4.9	+22.1%
DEXILANT	31.8	34.1	+2.2	+7.0%
ALOFISEL	-	0.0	+0.0	NA
AMITIZA	16.5	15.6	-0.9	-5.4%
LANSOPRAZOLE	17.7	14.4	-3.3	-18.6%
<b>GI*</b>	<b>182.4</b>	<b>216.5</b>	<b>+34.2</b>	<b>+18.7%</b>
NINLARO	20.7	28.5	+7.9	+38.0%
ICLUSIG	10.3	13.6	+3.3	+32.6%
ADCETRIS	18.9	21.9	+3.0	+15.7%
LEUPRORELIN	53.5	55.3	+1.7	+3.2%
ALUNBRIG	0.8	2.2	+1.4	NA
VECTIBIX	9.7	10.5	+0.8	+8.5%
VELCADE	68.0	62.2	-5.8	-8.5%
<b>Oncology</b>	<b>181.9</b>	<b>194.2</b>	<b>+12.3</b>	<b>+6.8%</b>
TRINTELLIX	22.1	26.0	+3.9	+17.5%
ROZEREM	8.3	9.9	+1.6	+19.3%
AZILECT	-	0.3	+0.3	NA
REMINYL	8.2	8.4	+0.2	+2.7%
COPAXONE	0.4	0.5	+0.1	+14.9%
<b>Neuroscience</b>	<b>39.0</b>	<b>45.1</b>	<b>+6.1</b>	<b>+15.6%</b>

\* Sales of pantoprazole is not included in GI (Gastroenterology). As it is a key driver in emerging markets, its sales is included in the 4<sup>th</sup> Growth Driver, EM. Note: Effective from FY2018, sales of certain products in Japan are now disclosed on a net basis, deducting items such as discounts and rebates, in alignment with the global managerial approach applied to individual product sales. The change in disclosure of individual product sales has been revised retrospectively, with prior year figures reclassified on a net basis to enable year-on-year comparisons. This reclassification has no impact on Takeda's financial statements and does not represent a correction of prior year figures.

23

## FY2018 H1 reported income statement

(Bn yen)	FY2017 H1	FY2018 H1	vs. PY	
<b>Revenue</b>	<b>881.4</b>	<b>880.6</b>	<b>-0.8</b>	<b>- 0.1%</b>
<b>Gross Profit</b>	<b>638.7</b>	<b>649.3</b>	<b>+10.6</b>	<b>+ 1.7%</b>
% of revenue	72.5%	73.7%		+1.3pp
SG&A	-297.3	-293.8	+3.5	- 1.2%
R&D	-155.1	-151.4	+3.7	- 2.4%
<b>Non-recurring Items</b>	<b>0.8</b>	<b>7.9</b>		
<b>Core Earnings</b>	<b>187.1</b>	<b>212.0</b>	<b>+24.9</b>	<b>+ 13.3%</b>
Amortization and impairment of intangibles	-56.9	-48.3	+8.6	- 15.1%
Other income/expenses	104.9	16.2	-88.7	- 84.6%
<b>Non-recurring Items (reversal)</b>	<b>-0.8</b>	<b>-7.9</b>		
<b>Operating Profit</b>	<b>234.3</b>	<b>172.0</b>	<b>-62.4</b>	<b>- 26.6%</b>
% of revenue	26.6%	19.5%		-7.1pp
Financial income/expenses	-1.9	-15.2	-13.3	NA
Equity income/loss	0.5	4.0	+3.5	NA
<b>Profit Before Tax</b>	<b>233.0</b>	<b>160.8</b>	<b>-72.2</b>	<b>- 31.0%</b>
Income tax	-60.3	-34.3	+26.0	- 43.1%
Non-controlling interests	0.1	0.2	+0.0	+ 21.8%
<b>Net Profit</b>	<b>172.8</b>	<b>126.7</b>	<b>-46.1</b>	<b>- 26.7%</b>
<b>EPS</b>	<b>221 yen</b>	<b>162 yen</b>	<b>- 60 yen</b>	<b>- 26.9%</b>

24

## FY2018 Q2 reported income statement

(Bn yen)	<u>FY2017 Q2</u>	<u>FY2018 Q2</u>	<u>vs. PY</u>	
<b>Revenue</b>	<b>433.2</b>	<b>430.8</b>	<b>-2.4</b>	<b>- 0.6%</b>
<b>Gross Profit</b>	<b>311.3</b>	<b>320.0</b>	<b>+8.7</b>	<b>+ 2.8%</b>
% of revenue	71.9%	74.3%		+2.4pp
SG&A	-151.4	-148.8	+2.6	- 1.7%
R&D	-79.4	-79.5	-0.1	+ 0.1%
<b>Non-recurring Items</b>	<b>0.2</b>	<b>3.3</b>		
<b>Core Earnings</b>	<b>80.7</b>	<b>95.1</b>	<b>+14.4</b>	<b>+ 17.9%</b>
Amortization and impairment of intangibles	-24.4	-24.3	+0.1	- 0.5%
Other income/expenses	-16.7	5.5	+22.3	NA
<b>Non-recurring Items (reversal)</b>	<b>-0.2</b>	<b>-3.3</b>		
<b>Operating Profit</b>	<b>39.4</b>	<b>73.1</b>	<b>+33.7</b>	<b>+ 85.6%</b>
% of revenue	9.1%	17.0%		+7.9pp
Financial income/expenses	-5.4	-6.6	-1.2	+ 23.0%
Equity income/loss	0.8	0.5	-0.3	- 39.0%
<b>Profit Before Tax</b>	<b>34.7</b>	<b>66.9</b>	<b>+32.2</b>	<b>+ 92.6%</b>
Income tax	-7.1	-18.5	-11.4	NA
Non-controlling interests	0.3	0.0	-0.3	- 95.3%
<b>Net Profit</b>	<b>28.0</b>	<b>48.4</b>	<b>+20.4</b>	<b>+ 72.8%</b>
<b>EPS</b>	<b>36 yen</b>	<b>62 yen</b>	<b>+26 yen</b>	<b>+ 72.0%</b>

25

## Bridge from Reported Revenue to Underlying Revenue

(Bn yen)	<u>Q2</u>				<u>H1</u>			
	<u>FY2017</u>	<u>FY2018</u>	<u>vs. PY</u>		<u>FY2017</u>	<u>FY2018</u>	<u>vs. PY</u>	
<b>Revenue</b>	<b>433.2</b>	<b>430.8</b>	<b>-2.4</b>	<b>- 0.6%</b>	<b>881.4</b>	<b>880.6</b>	<b>-0.8</b>	<b>- 0.1%</b>
FX effects*	-9.5	-2.8	+6.7	+1.6pp	-14.6	-5.8	+8.8	+1.0pp
<b>Revenue excluding FX effects*</b>	<b>423.7</b>	<b>428.0</b>	<b>+4.3</b>	<b>+ 1.0%</b>	<b>866.8</b>	<b>874.8</b>	<b>+8.0</b>	<b>+ 0.9%</b>
<b>Divestitures**</b>	<b>-6.2</b>	<b>-2.6</b>	<b>+3.6</b>	<b>+0.9pp</b>	<b>-34.5</b>	<b>-7.9</b>	<b>+26.6</b>	<b>+3.2pp</b>
LLPs sold to Teva JV	-	-	-	-	-16.8	-	+16.8	+2.0pp
TAK-935	-	-	-	-	-3.5	-	+3.5	+0.4pp
Multilab	-1.1	-	+1.1	+0.3pp	-2.4	-1.1	+1.3	+0.2pp
Techpool	-3.4	-2.6	+0.9	+0.2pp	-8.6	-6.6	+2.0	+0.2pp
Others	-1.6	-	+1.6	+0.4pp	-3.1	-0.2	+2.9	+0.4pp
<b>Underlying Revenue</b>	<b>417.5</b>	<b>425.4</b>	<b>+7.8</b>	<b>+ 1.9%</b>	<b>832.3</b>	<b>866.9</b>	<b>+34.6</b>	<b>+ 4.2%</b>

\* FX adjustment applies FY2018 plan rate to both years (1USD=105 yen, 1EUR=130 yen)

\*\* Divestitures adjustments in FY2017, mainly include one-time gain from the 7 LLPs sold to the JV with Teva in May 2017, and in FY2018, mainly include Multilab and Techpool revenue.  
Note: See reported to core, core to underlying reconciliation Excel sheet uploaded onto the website.

26

## Bridge from Operating Profit to Underlying Core Earnings

(Bn yen)	Q2				H1			
	FY2017	FY2018	vs. PY		FY2017	FY2018	vs. PY	
<b>Operating Profit</b>	<b>39.4</b>	<b>73.1</b>	<b>+33.7</b>	<b>+ 85.6%</b>	<b>234.3</b>	<b>172.0</b>	<b>-62.4</b>	<b>- 26.6%</b>
Amortization and impairment of intangibles	24.4	24.3	-0.1	-0.4pp	56.9	48.3	-8.6	-3.9pp
Proposed Shire integration costs (Other expenses)	-	3.1	+3.1	+11.0pp	-	3.2	+3.2	+1.4pp
Other income/expenses	16.7	-8.7	-25.4	-89.2pp	-104.9	-19.3	+85.6	+39.1pp
Non-recurring items (proposed Shire acquisition costs)	-	3.3	+3.3	+11.7pp	-	7.9	+7.9	+3.6pp
Non-recurring items (Others)	0.2	-	-0.2	-0.8pp	0.8	-	-0.8	-0.3pp
<b>Core Earnings</b>	<b>80.7</b>	<b>95.1</b>	<b>+14.4</b>	<b>+ 17.9%</b>	<b>187.1</b>	<b>212.0</b>	<b>+24.9</b>	<b>+ 13.3%</b>
FX effects*	-3.5	0.2	+3.6	+5.5pp	-5.6	-0.1	+5.5	+3.9pp
Divestitures**	0.4	-0.0	-0.4	-0.6pp	-20.6	0.1	+20.8	+14.6pp
LLPs sold to Teva JV	0.0	-	-0.0	-0.0pp	-16.8	-	+16.8	+11.8pp
TAK-935	-	-	-	-	-3.5	-	+3.5	+2.5pp
Multilab	0.2	-0.1	-0.2	-0.3pp	0.4	-0.1	-0.5	-0.4pp
Techpool	0.6	0.1	-0.5	-0.8pp	-0.3	0.5	+0.7	+0.5pp
Others	-0.3	-	+0.3	+0.5pp	-0.5	-0.2	+0.4	+0.3pp
<b>Underlying Core Earnings</b>	<b>77.7</b>	<b>95.3</b>	<b>+17.6</b>	<b>+ 22.7%</b>	<b>160.8</b>	<b>212.0</b>	<b>+51.2</b>	<b>+ 31.8%</b>

\* FX adjustment applies FY2018 plan rate to both years (1USD=105 yen, 1EUR=130 yen)

\*\* Divestitures adjustments: in FY2017, mainly include one-time gain from the 7 LLPs sold to the JV with Teva in May 2017, and in FY2018, mainly include Multilab and Techpool profits/losses.

Note: See reported to core, core to underlying reconciliation Excel sheet uploaded onto the website.

27

## Bridge from Net Profit to Underlying Core Net Profit

(Bn yen)	Q2				H1			
	FY2017	FY2018	vs. PY		FY2017	FY2018	vs. PY	
<b>Net Profit</b>	<b>28.0</b>	<b>48.4</b>	<b>+20.4</b>	<b>+ 72.8%</b>	<b>172.8</b>	<b>126.7</b>	<b>-46.1</b>	<b>- 26.7%</b>
<b>EPS</b>	<b>36 yen</b>	<b>62 yen</b>	<b>+ 26 yen</b>	<b>+ 72.0%</b>	<b>221 yen</b>	<b>162 yen</b>	<b>- 60 yen</b>	<b>- 26.9%</b>
Amortization and impairment of intangibles	18.2	18.4	+0.2	+1.0pp	40.1	36.7	-3.4	-2.1pp
Proposed Shire integration costs (Other expenses)	-	2.5	+2.5	+10.8pp	-	2.5	+2.5	+1.5pp
Other income/expenses	13.6	-9.7	-23.3	-102.5pp	-70.0	-17.2	+52.8	+32.8pp
Proposed Shire acquisition costs	-	3.6	+3.6	+15.7pp	-	7.9	+7.9	+4.9pp
Proposed Shire acquisition financial expenses	-	1.9	+1.9	+8.5pp	-	6.1	+6.1	+3.8pp
Other exceptional gains and losses	1.5	2.4	+0.8	+3.7pp	-1.4	2.6	+4.0	+2.5pp
<b>Core Net Profit</b>	<b>61.4</b>	<b>67.5</b>	<b>+6.1</b>	<b>+ 9.9%</b>	<b>141.5</b>	<b>165.2</b>	<b>+23.7</b>	<b>+ 16.7%</b>
FX effects*	-1.0	0.4	+1.4	+2.4pp	-1.4	1.4	+2.8	+2.6pp
Divestitures**	0.4	0.7	+0.3	+0.4pp	-14.1	0.6	+14.7	+13.4pp
<b>Underlying Core Net Profit</b>	<b>60.8</b>	<b>68.6</b>	<b>+7.8</b>	<b>+ 12.8%</b>	<b>126.1</b>	<b>167.3</b>	<b>+41.2</b>	<b>+ 32.7%</b>
<b>Underlying Core EPS</b>	<b>78 yen</b>	<b>88 yen</b>	<b>+ 10 yen</b>	<b>+ 12.8%</b>	<b>161 yen</b>	<b>214 yen</b>	<b>+ 53 yen</b>	<b>+ 32.7%</b>

\* FX adjustment applies FY2018 plan rate to both years (1USD=105 yen, 1EUR=130 yen)

\*\* Divestitures adjustments: in FY2017, mainly include one-time gain from the 7 LLPs sold to the JV with Teva in May 2017, and in FY2018, mainly include Multilab and Techpool profits/losses.

Note: See reported to core, core to underlying reconciliation Excel sheet uploaded onto the website.

28

## FY2018 H1 underlying income statement

(Bn yen)	<u>FY2017 H1</u>	<u>FY2018 H1</u>	<u>vs. PY</u>	
<b>Underlying Revenue</b>	<b>832.3</b>	<b>866.9</b>	<b>+34.6</b>	<b>+ 4.2%</b>
<b>Underlying Gross Profit</b>	<b>597.3</b>	<b>638.2</b>	<b>+40.9</b>	<b>+ 6.8%</b>
% of revenue	71.8%	73.6%		+1.9pp
SG&A	-287.2	-279.2	+8.0	- 2.8%
R&D	-149.3	-147.0	+2.3	- 1.5%
<b>Underlying Core Earnings</b>	<b>160.8</b>	<b>212.0</b>	<b>+51.2</b>	<b>+ 31.8%</b>
% of revenue	19.3%	24.5%		+5.1pp
Financial income/expenses	-3.4	-2.8	+0.6	- 18.6%
Equity income/loss	2.7	5.9	+3.2	NA
<b>Underlying Core Profit Before Tax</b>	<b>160.1</b>	<b>215.0</b>	<b>+54.9</b>	<b>+ 34.3%</b>
Income tax	-33.8	-47.6	-13.8	+ 40.9%
Non-controlling interests	-0.2	-0.2	+0.0	- 20.5%
<b>Underlying Core Net Profit</b>	<b>126.1</b>	<b>167.3</b>	<b>+41.2</b>	<b>+ 32.7%</b>
<b>Underlying Core EPS</b>	<b>161 yen</b>	<b>214 yen</b>	<b>+53 yen</b>	<b>+ 32.7%</b>

29

## FY2018 Q2 underlying income statement

(Bn yen)	<u>FY2017 Q2</u>	<u>FY2018 Q2</u>	<u>vs. PY</u>	
<b>Underlying Revenue</b>	<b>417.5</b>	<b>425.4</b>	<b>+7.8</b>	<b>+ 1.9%</b>
<b>Underlying Gross Profit</b>	<b>300.3</b>	<b>314.9</b>	<b>+14.7</b>	<b>+ 4.9%</b>
% of revenue	71.9%	74.0%		+2.1pp
SG&A	-146.2	-143.0	+3.2	- 2.2%
R&D	-76.4	-76.7	-0.3	+ 0.4%
<b>Underlying Core Earnings</b>	<b>77.7</b>	<b>95.3</b>	<b>+17.6</b>	<b>+ 22.7%</b>
% of revenue	18.6%	22.4%		+3.8pp
Financial income/expenses	-2.5	-1.5	+1.0	- 38.7%
Equity income/loss	1.9	1.4	-0.5	- 27.9%
<b>Underlying Core Profit Before Tax</b>	<b>77.1</b>	<b>95.1</b>	<b>+18.1</b>	<b>+ 23.4%</b>
Income tax	-16.2	-26.5	-10.3	+ 63.5%
Non-controlling interests	-0.1	-0.1	-0.0	+ 9.9%
<b>Underlying Core Net Profit</b>	<b>60.8</b>	<b>68.6</b>	<b>+7.8</b>	<b>+ 12.8%</b>
<b>Underlying Core EPS</b>	<b>78 yen</b>	<b>88 yen</b>	<b>+10 yen</b>	<b>+ 12.8%</b>

30

## Net debt/EBITDA ratio improved to 1.7x; non-core asset disposals generated 71.4 Bn yen

(Bn yen)	FY2017 H1	FY2018 H1	vs. PY	
Operating Free Cash Flow	84.6	59.4	- 25.1	-29.7%
Sale of Wako shares	84.5	-		
Sale of Techpool and Multilab shares	-	27.2	} 71.4	
Sale of other shareholdings*	14.3	38.2		
Real estate disposals*	31.9	6.0		
Dividend	-71.0	-71.4		
Bridge and term loan facilities	-	-15.4		
Others	-32.9	-21.4		
<b>Net increase (decrease) in cash</b>	<b>111.4</b>	<b>22.6</b>	<b>- 88.9</b>	<b>-79.8%</b>

\* FY2018 disposal objective: ~110 Bn yen in total

	FY2017 Q4	FY2018 Q2	vs. PY	
Debt	-985.7	-1,000.5	- 14.9	+1.5%
Net cash (debt)	-691.1	-683.5	+7.7	-1.1%
Gross debt/EBITDA ratio	2.6 x	2.5 x	- 0.1	
Net debt/EBITDA ratio	1.8 x	1.7 x	- 0.1	

31

## Revised FY2017 baseline for FY2018 Underlying growth guidance

(Bn yen)	FY2017
Revenue	1,770.5
FX effects	-37.8
Divestitures	-59.1
<b>Underlying Revenue</b>	<b>1,673.7</b>
Operating Profit	241.8
Amortization & impairment	+122.1
Other income	-169.4
Other expense	+126.6
Non-recurring items	+1.4
<b>Core Earnings</b>	<b>322.5</b>
FX effects	-12.1
Divestitures	-26.8
<b>Underlying Core Earnings</b>	<b>283.6</b>
<b>% of revenue</b>	<b>16.9%</b>
<b>Underlying Core EPS (yen)</b>	<b>269</b>

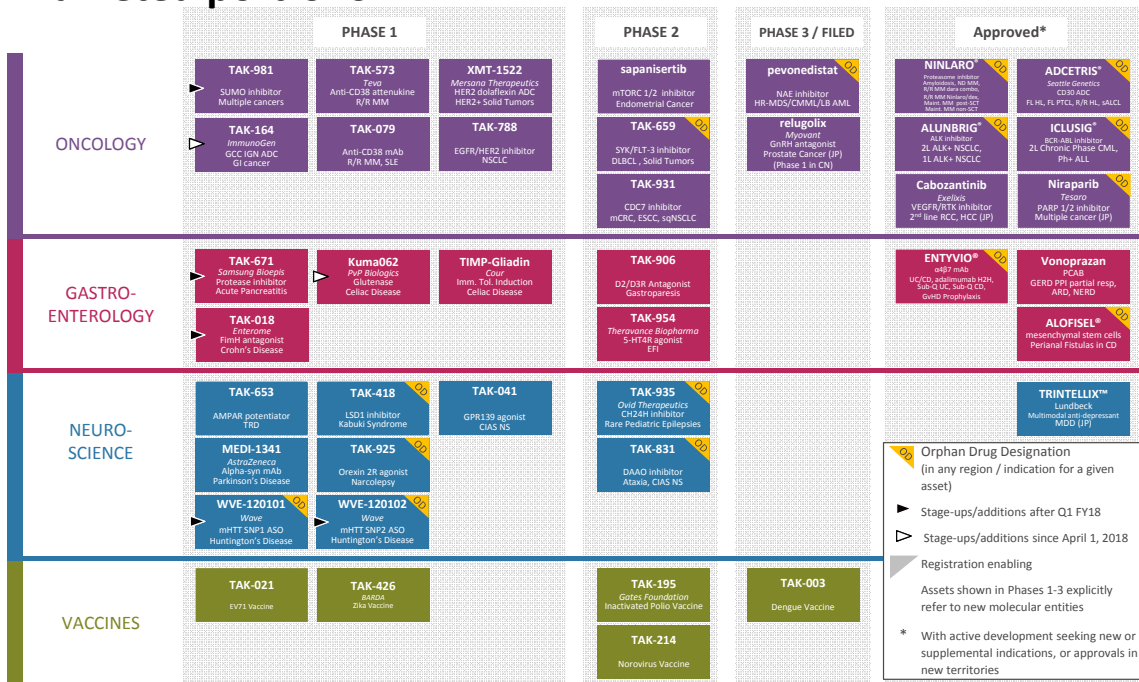
NOTE:

Events in FY2018 may result in recalculation of the FY2017 baseline. FY2018 underlying growth guidance is based on FY2018 plan rates (1USD=105 yen, 1EUR=130 yen, etc.)

32

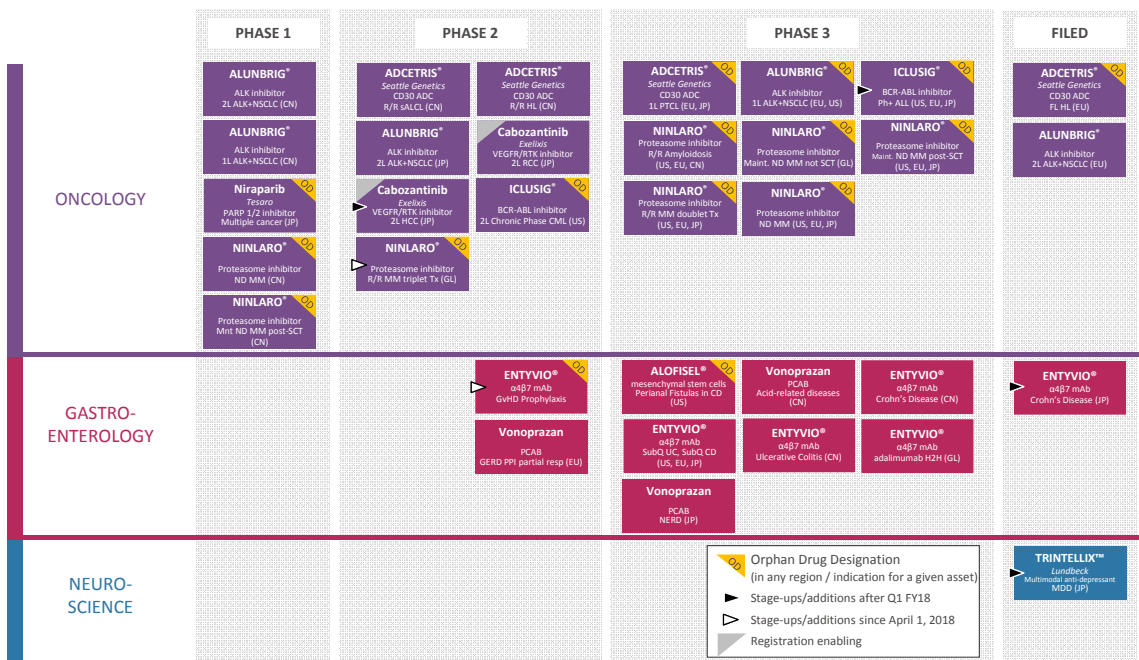


# Investing in early pipeline innovation, while maximizing the value of our marketed portfolio



Pipeline as of October 31, 2018; region abbreviations: GL = global (USA, Europe, Japan, China)  
For glossary of disease abbreviations please refer to appendix

# Maximizing the value of Life Cycle Management programs



Pipeline as of October 31, 2018; region abbreviations: GL = global (USA, Europe, Japan, China)  
For glossary of disease abbreviations please refer to appendix

# Glossary of Abbreviations

AD	Alzheimer's disease	EE H	erosive esophagitis healing	LCM	lifecycle management	RCC	renal cell cancer
ADC	antibody drug conjugate	EE M	erosive esophagitis maintenance	mAb	monoclonal antibody	RTK	receptor tyrosine kinase
ADHD	attention deficit hyperactivity disorder	EFI	enteral feeding intolerance	MAOB	monoamine oxidase B	sALCL	systemic anaplastic large cell lymphoma
ALK	anaplastic lymphoma kinase	EGFR	epidermal growth factor receptor	MLD	metachromatic leukodystrophy	SBS	short bowel syndrome
ALS	amyotrophic lateral sclerosis	EOE	eosinophilic esophagitis	NAE	NEDD8 activating enzyme	SC	subcutaneous formulation
AML	acute myeloid leukemia	ESCC	esophageal squamous-cell carcinoma	NASH	non-alcoholic steatohepatitis	SCT	stem cell transplant
AMR	antibody mediated rejection	FL	front line	ND	newly diagnosed	SCZ	schizophrenia
ASCT	autologous stem cell transplant	FLT-3	FMS-like tyrosine kinase 3	NDA	new drug application	SLE	systemic lupus erythematosus
ARD	acid-related diseases	FSI	first subject in	Neg	negative	sq	squamous
BTK	Bruton's tyrosine kinase	GCC	guanylyl cyclase C	NERD	non-erosive reflux disease	SR	steroid refractory
BBB	blood brain barrier	GERD	gastroesophageal reflux disease	NF	new formulation	SR-GvHD	steroid refractory acute graft vs host disease
BOS	budesonide oral suspension	GI	gastrointestinal	NK	natural killer	STING	stimulator of interferon genes
CAR-T	Chimeric antigen receptor-T	GnRH	gonadotropin-releasing hormone	NME	new molecular entity	SUMO	small ubiquitin-related modifier
CD	Crohn's disease	GU	gastric ulcer	NSCLC	non-small cell lung cancer	SYK	spleen tyrosine kinase
CHAWI	congenital hemophilia A with inhibitors	GvHD	graft versus host disease	NSCT	non stem cell transplant	TESD	treatment emergent sexual dysfunction
CIAS	cognitive impairment associated with schizophrenia	HAE	hereditary angioedema	NS	negative symptoms		
CIC	chronic idiopathic constipation	H2H	head to head	OIC	opioid induced constipation		
CIDP	chronic inflammatory demyelinating polyneuropathy	HCC	hepatocellular carcinoma	ORR	overall response rate		
CML	chronic myeloid leukemia	HemA	hemophilia A	PARP	poly (ADP-ribose) polymerase		
CMML	chronic myelomonocytic leukemia	HER2	human epidermal growth factor receptor 2	PBS	phosphate buffered saline		
CSF	cerebrospinal fluid	HL	Hodgkin's lymphoma	PCAB	potassium competitive acid blocker		
CNS	central nervous system	HR MDS	high-risk myelodysplastic syndromes	PFIC	progressive familial intrahepatic cholestasis		
CRL	complete response letter	IBD	inflammatory bowel disease	Ph+ ALL	Philadelphia chromosome-positive acute lymphoblastic leukemia		
CTCL	cutaneous T-cell lymphoma	IBS-C	irritable bowel syndrome with constipation	PID	primary immunodeficiency		
CTTP	congenital thrombotic thrombocytopenic purpura	IND	investigational new drug	PPI	proton pump inhibitor		
DAAO	D-amino acid oxidase	I/O	immuno-oncology	PK	pharmacokinetics		
DED	dry eye disease	IV	intravenous	POC	proof of concept		
DLBCL	diffuse large B-cell lymphoma	iPSC	induced pluripotent stem cells	POI	post-operative ileus		
DM	diabetes mellitus	LBD	Lewy body dementia	PTCL	peripheral T-cell lymphoma		
DU	duodenal ulcer	LB AML	low-blast acute myeloid leukemia	R/R	relapsed/refractory		
Dx	diagnosis	LSD1	Lysine specific demethylase 1	RA	rheumatoid arthritis		

