



THERAPEUTIC AREA FOCUS IN GI WITH SPOTLIGHT ON CELIAC DISEASE



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WE TARGET UNMET NEEDS THAT ALIGN WITH OUR STRENGTHS



AREAS OF FOCUS



High unmet medical need



Potential to advance SoC through innovative science – by being first or best in class



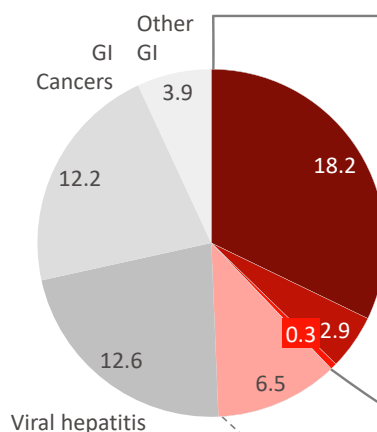
Fit with internal strengths



Ability to create a commercially - viable path

GI WW RX SALES 2018 (USD Bn)

Total = \$57Bn



TAKEDA GI DISEASE AREAS

GI inflammation

GI motility

Liver fibrosis

Acid related diseases

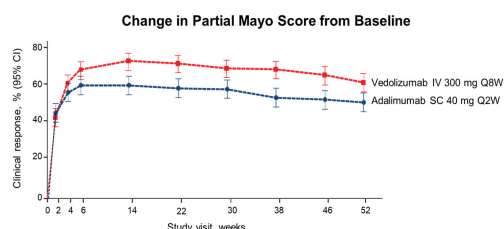
WE STRENGTHEN ENTYVIO BY CONTINUOUSLY IMPROVING VALUE FOR PATIENTS



COMPETITIVE POSITIONING

VARSITY: 1st Head-to-Head study in IBD (UC)

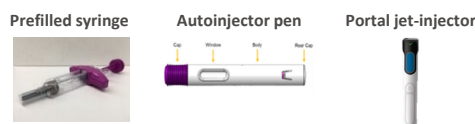
- Vedolizumab was superior to adalimumab on the primary endpoint of clinical remission at wk 52
- Onset of action as rapid as anti-TNF



EXPANDED PATIENT POPULATIONS

Entyvio Subcutaneous Development

- Positive VISIBLE UC and CD trials
- Subject to regulatory approval, on track to launch exclusive, digital, needle-free jet-injector by 2022



Gut GvHD prophylaxis

- Could transform SoC for cancer patients undergoing allo stem-cell transplants



GEOGRAPHIC EXPANSION

Entyvio IV

- Approved in **68 countries**
- Launched in Japan (UC: Nov 2018, CD: May 2019)

EXPECTED MILESTONES (FY)

2019
Entyvio (SC UC) US approval

2020
Entyvio (SC CD) US, EU approval
Entyvio (SC UC) EU, JP approval
Entyvio (IV) CN approval

2021
Entyvio GvHD Ph3 readout

Source: Sands et al. Vedolizumab versus Adalimumab for Moderate-to-Severe Ulcerative Colitis. N Engl J Med 2019; 381:1215-1226

IBD: Inflammatory Bowel Disease; UC: ulcerative colitis; CD: Crohn's Disease; IV=intravenous; SC=subcutaneous; TNF=tumour necrosis factor; SoC: standard of care; CN: China; JP: Japan; GvHD: graft versus host disease; Clinical remission: Complete Mayo score of ≤2 points and no individual subscore >1 point

2

WE ARE POSITIONED TO DELIVER NEAR-TERM & SUSTAINED GROWTH



TARGET APPROVAL	WAVE 1 ¹					WAVE 2 ²				PLATFORMS		
	CLINICAL-STAGE NMEs											
	FY20	FY21	FY22	FY23	FY24	FY25 AND BEYOND						
 ONCOLOGY		TAK-788 ³ 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 ³ 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 ⁴ 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				
 GASTRO-ENTEROLOGY	TAK-721 EoE					WVE-120101 Huntington's Disease	WVE-120102 Huntington's Disease					
						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
 VACCINES						TAK-954 POGD	TAK-906 Gastroparesis	TAK-951 Nausea & vomiting				
		TAK-003 Dengue Vaccine				TAK-214 Noravirus 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

3

TAK-721: ON TRACK TO BE THE FIRST FDA APPROVED AGENT TO TREAT EOSINOPHILIC ESOPHAGITIS (EOE)



ADDRESSES SIGNIFICANT UNMET NEED

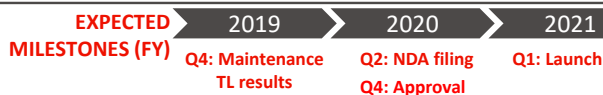
- Chronic, allergic, inflammatory condition of the esophagus that results in swallowing dysfunction
- Diagnosed prevalence is expected to increase significantly



No approved US medication
SOC is food elimination, off-label use¹



TAK-721 granted breakthrough therapy designation by FDA in 2016

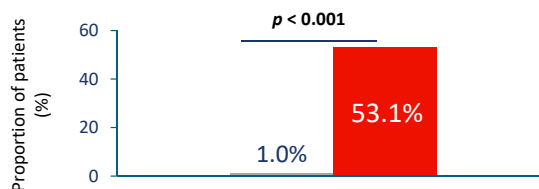


1. Swallowed use of glucocorticoids intended for asthma (e.g., home or compounded thickening of budesonide solution, or swallowing fluticasone aerosol).

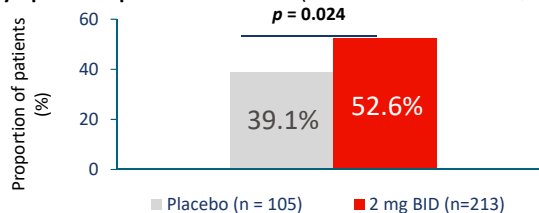
INDUCTION DATA SHOWS SIGNIFICANT HISTOLOGIC AND SYMPTOM RESPONSE

Results presented at presidential plenary at ACG, Texas, Oct 2019

Histologic Response at 12 Weeks (peak ≤ 6 eosinophils/hpf on biopsy)



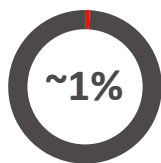
Symptom Response at 12 Weeks (≥ 30% reduction in DSQ score)



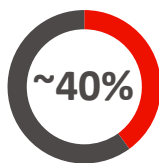
DSQ score: Dysphagia Symptom Questionnaire patient reported outcome score eos/hpf: peak eosinophils per high-powered field from endoscopic biopsies
Eos/hpf: eosinophils per high-power field; BID: Twice daily; SOC: Standard of care; NDA: new drug application

4

CELIAC DISEASE IS AN EXAMPLE OF A HIGH UNMET NEED AREA WITH NO THERAPIES



Global population affected by celiac¹



Patients still suffer from symptoms despite being on a gluten-free diet



Estimated global, eligible patient population²

- Overlooked disease, growing prevalence
- Chronic symptoms
- Higher risk of certain cancers
- High treatment burden affecting the whole family
- No current pharmacologic therapies



“Some of us are so extremely sensitive that one little crumb will make us extremely sick. I'm one of those people, and there is really nothing I can do about it”

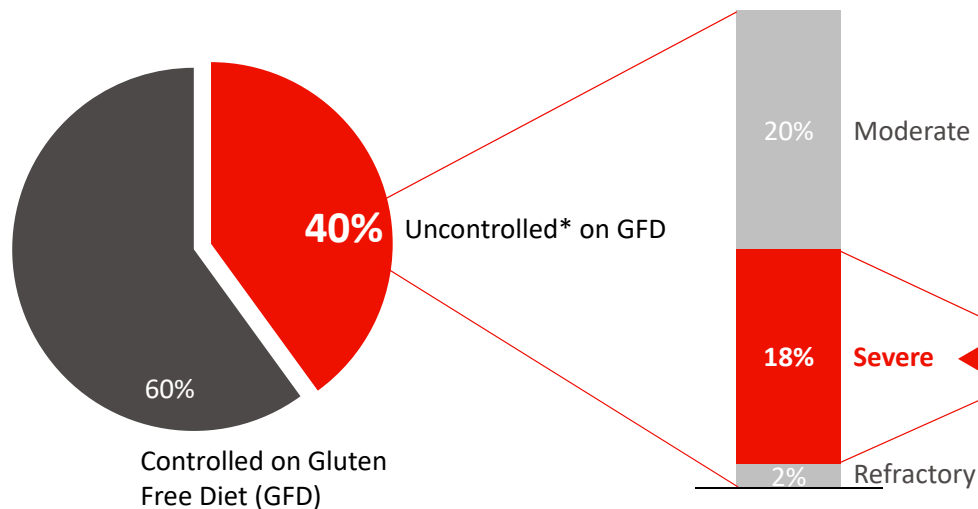
– Delisi, Celiac disease patient

1. Pooled global prevalence; Clin Gastroenterol Hepatol. 2018 Jun;16(6):823-836

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

5

WE ARE FOCUSING ON THE NARROWEST POPULATION WITH HIGH UNMET NEED



Our focus:

- Niche patient segment with the highest unmet need
- Severe symptoms with villous atrophy
- Continue to suffer despite the GFD and are highly likely to take a therapy

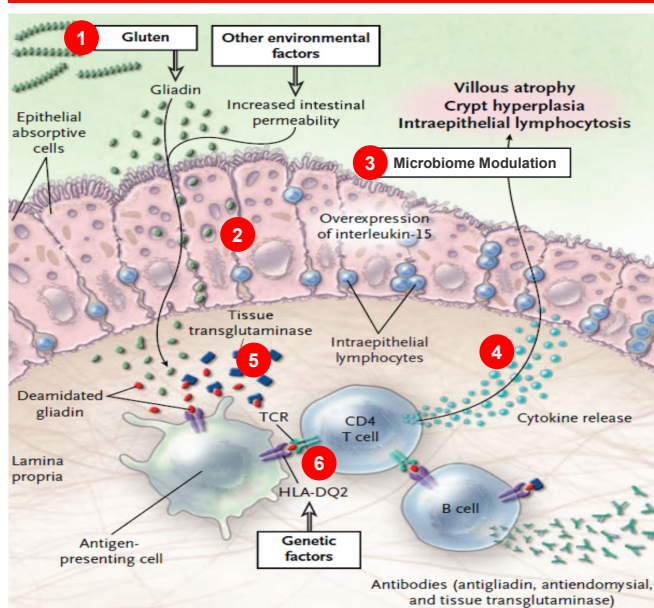
*Uncontrolled defined as ongoing chronic moderate to severe symptoms with villous atrophy

6

OUR APPROACH TO TREATING CELIAC DISEASE



TREATMENT OPPORTUNITIES FOR CELIAC DISEASE



- 1 Enzymatic digestion of gluten
- 2 Reduce intestinal permeability
- 3 Microbiome modulation
- 4 Cytokine inhibition
- 5 Transglutaminase inhibition
- 6 Promote Immune tolerance



PVP BIOLOGICS

Kuma062 promises greatly increased enzymatic efficiency and improved formulation over predecessors



TAK-101 (TIMP-GLIA) has the potential to be a first in class, tolerizing immune therapy for celiac disease

Source: Green and Cellier, 2007

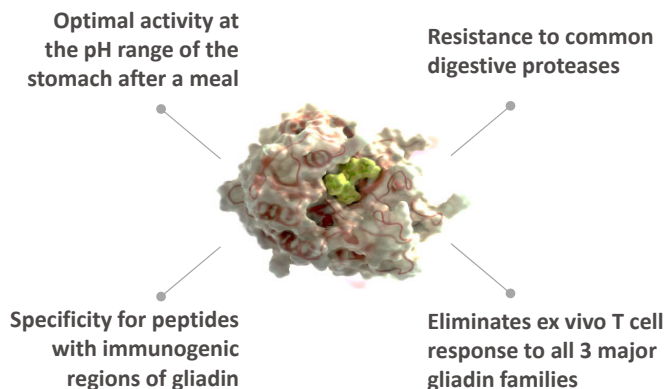
7

KUMA062: A HIGHLY POTENT ORAL GLUTENASE THAT COULD CHANGE THE STANDARD OF CARE IN CELIAC DISEASE



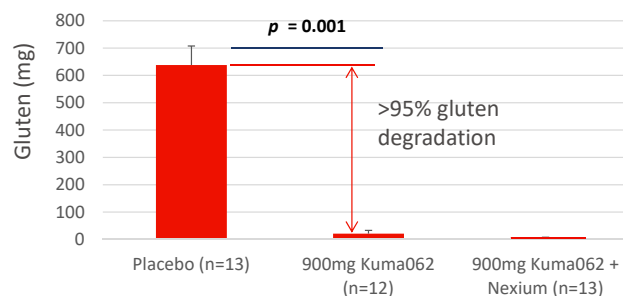
ABOUT KUMA062

- Kuma062 is an oral, computationally-engineered super glutenase
- Enhanced catalytic activity compared to other glutenases



CLINICAL DATA SHOWS KUMA062 CAN DEGRADE >95% OF INGESTED GLUTEN

Gluten recovery in gastric contents aspirated 30mins after meal containing 3g of gluten



- Kuma well-tolerated, no identified safety concern
- Decision to acquire PVP Biologics expected Q3 FY2019

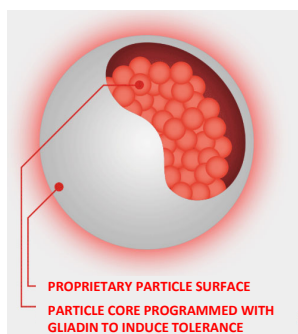
8

TAK-101: POTENTIAL BEST-IN-CLASS, INTRAVENOUS THERAPY FOR CELIAC DISEASE DESIGNED TO MODIFY T CELL RESPONSE



ABOUT TAK-101*

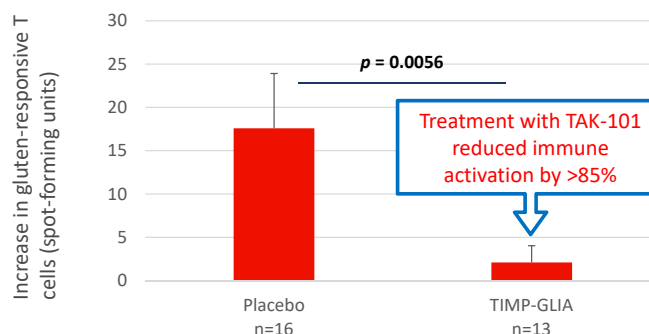
- Biodegradable polymer encapsulating antigen
- Designed to induce tolerance to gluten, reduce T cell responses to gliadin



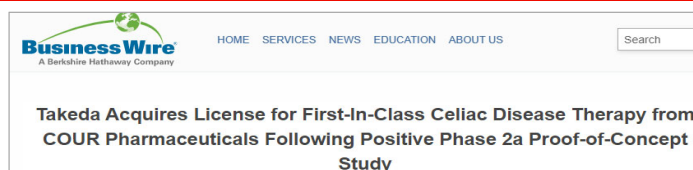
- Expected to provide durable (3 months or longer) down regulation of T cell responses to immunogenic gliadin peptides

TAK-101 REDUCES IMMUNE ACTIVATION AFTER GLUTEN EXPOSURE

Interferon-gamma ELISPOT measurement of gluten-responsive T cells



TAKEDA ACQUIRED EXCLUSIVE GLOBAL LICENSE TO TAK-101



*Formerly TIMP-GLIA
Source: <https://www.courpharma.com/our-technology/>

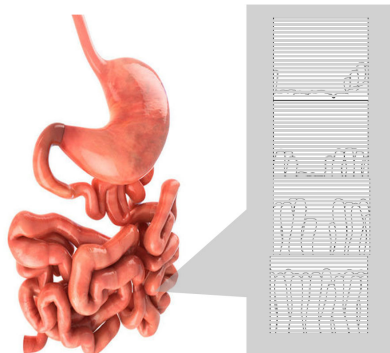
9

WE ARE LEADING THE SCIENCE IN CELIAC DISEASE WITH A NEW AI - BASED TOOL AND INGESTIBLE DEVICE



PIONEERING AT BOUNDARIES OF CLINICAL MEDICINE

- Innovative, non-invasive, patented method of measuring total burden of intestinal disease



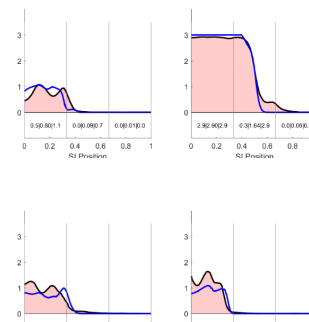
INNOVATIVE USE OF TECHNOLOGY

- Ingestible high resolution camera pill
- Modern machine-learning/ AI based image processing



PRECISION MEASUREMENT USING AI

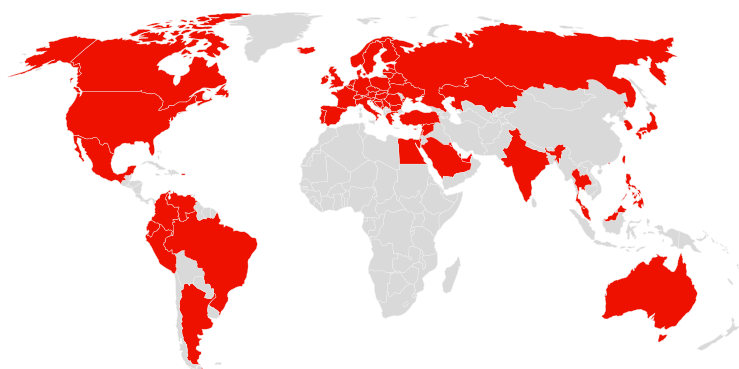
- Pioneering Automated Image assessment quantifies disease burden



TAKEDA IS THE BEST COMPANY TO BRING CELIAC THERAPIES TO PATIENTS



World-class, fully connected GI commercial infrastructure across 65+ countries that supports \$6bn+ revenues

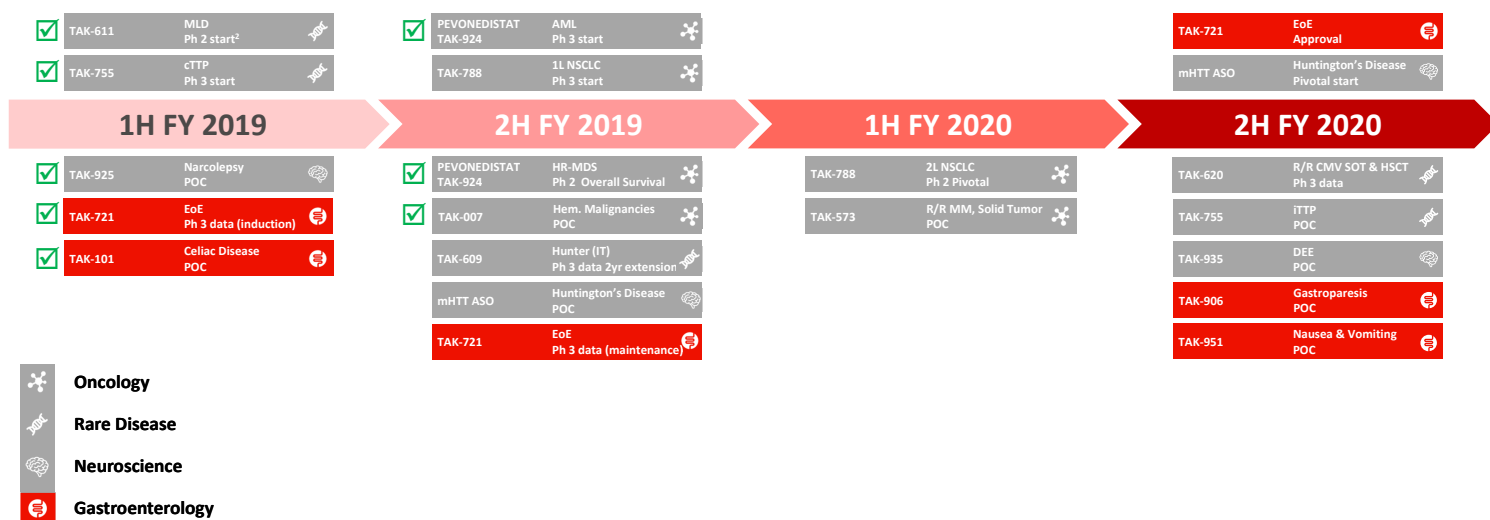


- Extensive GI clinical footprint
- Strong reputation for scientific excellence
- Lauded for calculated risk-taking by the GI community
- Experience with redefining guidelines and treatment paths

NME MILESTONES ACHIEVED IN FY19 AND LOOKING AHEAD TO OTHER POTENTIAL MILESTONES¹ THROUGH FY20



PIVOTAL STUDY STARTS, APPROVALS



KEY DATA READOUTS

1. Potential key milestone dates as of November 14, 2019. The dates included herein are estimates based on current data and are subject to change
2. Potentially registration enabling

12

SUMMARY



1

We have built an industry-leading portfolio rooted in unparalleled scientific excellence and outstanding global commercial strength

2

We are well positioned to bring the first therapies to celiac patients that could change the standard of care

3

We have multiple milestones, including expected key approvals in the next 2 years that will be transformative for patients

13