

R&D Pipeline

The list shows the development status in the target diseases for which we aim to obtain approval in Japan, the United States, Europe and/or China.

As of Feb 2024

Underlined items indicate changes from the previous announcement in Nov 2023.

XTANDI and Strategic products (1/2)

Generic name Code No. (Brand name)	Modality / Technology	Classification	Target disease	Phase *	Licensor **	Remarks
enzalutamide MDV3100 (XTANDI)	Small molecule	Androgen receptor inhibitor	Metastatic castration-sensitive prostate cancer	China    Filed (Sep 2023)	Pfizer	
			Non-metastatic castration-sensitive prostate cancer	US <u>Approved (Nov 2023)</u> Europe   Filed (Sep 2023)		
enfortumab vedotin ASG-22ME (PADCEV)	Antibody-drug conjugate (ADC)	Nectin-4 targeted ADC	Metastatic urothelial cancer, platinum-containing chemotherapy and PD-1/L1 inhibitor pretreated	China    Filed (Mar 2023)	In-house [Co-development with Pfizer]	
			Metastatic urothelial cancer, previously untreated (first line; combo with pembrolizumab)	US <u>Approved (Dec 2023)</u> Europe <u>Filed (Jan 2024)</u> Japan <u>Filed (Jan 2024)</u>		
			Muscle-invasive bladder cancer (combo with pembrolizumab)	P-III		
			Other solid tumors	P-II		
			Non-muscle-invasive bladder cancer	P-I		
gilteritinib ASP2215 (XOSPATA)	Small molecule	FLT3 inhibitor	Post-chemotherapy maintenance acute myeloid leukemia	P-III	In-house	
			Post-hematopoietic stem cell transplant maintenance acute myeloid leukemia	P-III		
			Newly diagnosed acute myeloid leukemia with high intensity induction of chemotherapy	P-III		
			Newly diagnosed acute myeloid leukemia with low intensity induction of chemotherapy	P-I		
			Acute myeloid leukemia in pediatric patients	P-III		

## XTANDI and Strategic products (2/2)

Generic name Code No. (Brand name)	Modality / Technology	Classification	Target disease	Phase *	Licensors **	Remarks
<b>zolbetuximab</b> <b>IMAB362</b>	Antibody	Anti-Claudin 18.2 monoclonal antibody	Gastric and gastroesophageal junction adenocarcinoma	Japan    Filed (Jun 2023) US        Filed (Jul 2023) Europe   Filed (Jul 2023) China     Filed (Jul 2023)	In-house (Ganymed)	
			Pancreatic adenocarcinoma	P-II		
<b>fezolinetant</b> <b>ESN364</b> (VEOZAH***)	Small molecule	NK3 receptor antagonist	Vasomotor symptoms due to menopause	Europe <u>Approved (Dec 2023)</u> China     P-III Japan      P-III	In-house (Ogeda)	
<b>avacincaptad pegol</b> (IZERVAY)	Pegylated RNA aptamer	Complement C5 inhibitor	Geographic atrophy secondary to age-related macular degeneration	Europe    Filed (Aug 2023)		
			Stargardt disease	P-II		
<b>resamirigene bilparvovec</b> <b>AT132</b>	Gene therapy (AAV-based gene therapy)	MTM1 gene replacement to express myotubularin	X-linked myotubular myopathy	P-II	In-house (Audentes Therapeutics)	
<b>roxadustat</b> <b>ASP1517/FG-4592</b>	Small molecule	HIF-PH inhibitor	Anemia associated with chronic kidney disease in pediatric patients	Europe    P-III	FibroGen	Astellas has rights in Japan, Europe, the Commonwealth of Independent States, the Middle East, and South Africa.

\* Compounds are developed globally unless noted. The list shows the most advanced stage if the stages are different depending on the region. The list specifies the area if the compound is developed in limited areas.

\*\* Compounds with "In-house" in this column include ones discovered by collaborative research.

\*\*\* Approved as "VEOZA" in Europe.

### Updates from the previous announcement (Nov 2023):

**enzalutamide:** Approved in US in Nov 2023 for non-metastatic castration-sensitive prostate cancer with biochemical recurrence at high risk for metastasis.

**enfortumab vedotin:** Approved in US in Dec 2023 and filed in Europe and Japan in Jan 2024 for locally advanced or metastatic urothelial cancer in the first-line setting.

**fezolinetant:** Approved in Europe in Dec 2023 for moderate to severe vasomotor symptoms associated with menopause. Entered into Phase 3 in Japan for vasomotor symptoms associated with menopause.

**avacincaptad pegol:** Removed the description of the approval in the US in Aug 2023 for geographic atrophy secondary to age-related macular degeneration.

Projects with Focus Area approach (1/2)

Primary Focus	Generic name Code No. (Brand name)	Modality / Technology	Classification	Target disease	Phase *	Licensors **	Remarks
Immuno-oncology	ASP1570	Small molecule	DGKζ inhibitor	Cancer	P-I	In-house	
	ASP2138	Antibody	Anti-Claudin 18.2 and anti-CD3 bispecific antibody	Gastric and gastroesophageal junction adenocarcinoma, pancreatic adenocarcinoma	P-I	Xencor [Discovered through collaborative research]	
	ASP2074	Antibody	Anti-TSPAN8 and anti-CD3 bispecific antibody	Cancer	P-I	In-house	
	ASP1002	Antibody	Bispecific antibody	Cancer	P-I	In-house	
	ASP1012	Oncolytic virus	Oncolytic virus encoding leptin-IL-2	Cancer	P-I	KaliVir	
Blindness and Regeneration	ASP7317	Cell therapy	Retinal pigment epithelium cells	Geographic atrophy secondary to age-related macular degeneration	P-I	In-house (Ocata Therapeutics)	
Mitochondria	bocidelpar ASP0367/MA-0211	Small molecule	PPARδ modulator	Primary mitochondrial myopathies	P-II	In-house (Mitobridge)	
				Duchenne muscular dystrophy	P-I		

## Projects with Focus Area approach (2/2)

Primary Focus	Generic name Code No. (Brand name)	Modality / Technology	Classification	Target disease	Phase *	Licensors **	Remarks
Genetic regulation	resamirigene bilparvovec AT132 ***	Gene therapy (AAV-based gene therapy)	MTM1 gene replacement to express myotubularin	X-linked myotubular myopathy	P-II	In-house (Audentes Therapeutics)	
	zocaglusagene nuzaparvovec AT845	Gene therapy (AAV-based gene therapy)	GAA gene replacement to express GAA enzyme	Pompe disease	P-I	In-house (Audentes Therapeutics)	
Targeted Protein Degradation	ASP3082	Small molecule	KRAS G12D degrader	Cancer	P-I	In-house	

\* Compounds are developed globally unless noted. The list shows the most advanced stage if the stages are different depending on the region. The list specifies the area if the compound is developed in limited areas.

\*\* Compounds with "In-house" in this column include ones discovered by collaborative research.

\*\*\* AT132 is also listed in "XTANDI and Strategic products".

## Others

Generic name Code No. (Brand name)	Modality / Technology	Classification	Target disease	Phase *	Licensors **	Remarks
<b>mirabegron</b> <b>YM178</b>	Small molecule	$\beta_3$ receptor agonist	Neurogenic detrusor overactivity in pediatric patients	Europe P-III	In-house	
<b>peficitinib</b> <b>ASP015K</b>	Small molecule	JAK inhibitor	Rheumatoid arthritis	China Filed (Aug 2022)	In-house	
<b>isavuconazole</b>	Small molecule	Azole antifungal	Invasive aspergillosis and invasive mucormycosis in pediatric patients	US <u>Approved (Dec 2023)</u>	Basilea	
<b><u>abiraterone decanote</u></b> <b><u>PRL-02/ASP5541</u></b>	<u>Small molecule</u>	<u>CYP17 lyase inhibitor</u>	<u>Prostate cancer</u>	<u>P-I</u>	<u>In-house</u> <u>(Propella</u> <u>Therapeutics)</u>	

\* Compounds are developed globally unless noted. The list shows the most advanced stage if the stages are different depending on the region. The list specifies the area if the compound is developed in limited areas.

\*\* Compounds with "In-house" in this column include ones discovered by collaborative research.

### Updates from the previous announcement (Nov 2023):

**isavuconazole:** Approved in US in Dec 2023 for invasive aspergillosis and invasive mucormycosis in pediatric patients.

**abiraterone decanote:** Added a program.

Rx+ Program

As of Feb 2024

Category	Program	Concept	Status*	Partner	Remarks
Digital health Other services	BlueStar	Digital therapeutics for adults with diabetes	Under clinical trial preparation	Welldoc Roche Diabetes Care Japan	
	Z1608	Digital therapeutic plus remote patient monitoring for heart failure	Under development	Welldoc Eko	
Drug-device combination	pudexacianinium chloride ASP5354	Intraoperative ureter visualization for use in patients undergoing minimally invasive and open abdominopelvic surgeries	P-III	Stryker	

\* The list shows the most advanced stage if the stages are different depending on the region.

<p><b>Updates from the previous announcement (Nov 2023):</b> <b>pudexacianinium chloride:</b> Discontinued the development for lymphatic mapping in Phase 2 due to strategic reasons.</p>
---