

R&D Pipeline Phase III & Registration

Phase III

Name	Description	Indication
Dupixent ^{®A}	Anti-IL-4/IL-13 mAb	Bullous Pemphigoid
Dupixent ^{®A}	Anti-IL-4/IL-13 mAb	Chronic Spontaneous Urticaria
Dupixent ^{®A}	Anti-IL-4/IL-13 mAb	Chronic Obstructive Pulmonary Disease
Dupixent ^{®A}	Anti-IL-4/IL-13 mAb	Chronic Inducible Cold Urticaria
Dupixent ^{®A}	Anti-IL-4/IL-13 mAb	Chronic Rhinosinusitis without Nasal Polyps
Dupixent ^{®A}	Anti-IL-4/IL-13 mAb	Allergic Fungal Rhinosinusitis
Dupixent ^{®A}	Anti-IL-4/IL-13 mAb	Chronic Pruritus of Unknown Origin
itepekimab ^A	Anti-IL-33 mAb	Chronic Obstructive Pulmonary Disease
Sarclisa [®]	Anti-CD38 mAb + combinations	1L Newly Diag. MM Ti (IMROZ)
Sarclisa [®]	Anti-CD38 mAb + combinations	1L Newly Diag. MM Te (GMMG)
Sarclisa [®]	Anti-CD38 mAb + combinations	Smoldering MM (ITHACA)
Sarclisa [®]	Anti-CD38 mAb SubQ. + combinations	2/3L Relapsed, Refractory MM (IRAKLIA)
tusamitamab ravtansine	Anti-CEACAM5 ADC	2/3L NSCLC
tolebrutinib	BTK inhibitor	Relapsing Multiple Sclerosis
tolebrutinib	BTK inhibitor	Primary Progressive MS
tolebrutinib	BTK inhibitor	Secondary Progressive MS
tolebrutinib	BTK inhibitor	Myasthenia Gravis
Nexviazyme [®]	Enzyme Replacement Therapy (GAA)	Pompe Disease - Infantile Onset
venglustat	Oral GCS inhibitor	GM2 Gangliosidosis
venglustat	Oral GCS inhibitor	Gaucher Disease Type 3
venglustat	Oral GCS inhibitor	Fabry Disease
fitusiran	RNAi targeting anti-thrombin	Hemophilia A and B
fitusiran	RNAi targeting anti-thrombin	Hemophilia A and B pediatric
rilzabrutinib	BTK inhibitor	Immune Thrombocytopenia
MenQuadfi [®]	Meningococcal (A,C,Y,W) conjugate vaccine	Meningitis 6w+ (U.S. / EU)
VRVg	Purified vero rabies Vaccine	Rabies
Beyfortus ^{®2,C}	Anti-RSV mAb (HARMONIE)	Respiratory Syncytial Virus (RSV)

Registration

Name	Description	Indication
Libtayo ^{®A}	Anti-PD-1 mAb + chemotherapy	1L NSCLC
Altuviiio ^{™1,B}	rFVIIIFc – vWF – XTEN	Hemophilia A
Vidprevtyn ^{®D}	Recombinant baculovirus Vaccine	COVID-19
Beyfortus ^{®2,C}	Anti-RSV mAb	Respiratory Syncytial Virus (RSV)

- Immuno-inflammation
- Oncology
- Neurology
- Rare Diseases
- Rare Blood Disorders
- Vaccines

As of September 30, 2022. For collaborations see slide 56. For abbreviations see slide 57.
1. Also known as efanesoctocog alfa. 2. Also known as nirsevimab.

R&D Pipeline – Phase II

Phase II

	Name	Description	Indication
R	Kevzara ^{®A}	Anti-IL-6 mAb	Polyarticular Juvenile Idiopathic Arthritis
R	Kevzara ^{®A}	Anti-IL-6 mAb	Systemic Juvenile Arthritis
	amlitelimab ¹	Anti-OX40L mAb	Atopic Dermatitis
	amlitelimab ¹	Anti-OX40L mAb	Asthma
	rilzabrutinib	BTK inhibitor	IgG4-related disease
	rilzabrutinib	BTK inhibitor	Atopic Dermatitis
	rilzabrutinib	BTK inhibitor	Asthma
	rilzabrutinib	BTK inhibitor	Chronic Spontaneous Urticaria
	eclitasertib ^{E,2}	RIPK1 inhibitor	Cutaneous Lupus Erythematosus
	frexalimab ^{F,3}	Anti-CD40L mAb	Sjogren's Syndrome
	frexalimab ^{F,3}	Anti-CD40L mAb	Systemic Lupus Erythematosus
	atuzabrutinib ⁴	BTK inhibitor (topical)	Atopic Dermatitis
	SAR445088 ⁵	Complement C1s inhibitor	Antibody-Mediated Rejection
	Sarclisa [®]	Anti-CD38 mAb	1/2L AML / ALL pediatrics
	Sarclisa [®]	Anti-CD38 mAb + combinations	Relapsed, Refractory Multiple Myeloma
	alomfilimab ⁶	Anti-ICOS mAb	Solid tumors
	tusamitamab ravtansine	Anti-CEACAM5 ADC + ramucirumab	2/3L NSCLC
	tusamitamab ravtansine	Anti-CEACAM5 ADC	Exploratory Solid tumors
	tusamitamab ravtansine	Anti-CEACAM5 ADC + pembrolizumab	1L NSCLC
	tusamitamab ravtansine	Anti-CEACAM5 ADC + ramucirumab	Gastric cancer
	SAR442720 ^G	SHP2 inhibitor + KRAS inhibitor	2L NSCLC

	Name	Description	Indication
	SAR445088 ⁵	Complement C1s inhibitor	CIDP
	frexalimab ^{F,3}	Anti-CD40L mAb	Multiple Sclerosis
	SAR443820 ^{E,7}	RIPK1 inhibitor	Amyotrophic Lateral Sclerosis
	Sarclisa [®]	Anti-CD38 mAb	Warm Autoimmune Hemolytic Anemia
	rilzabrutinib	BTK inhibitor	Warm Autoimmune Hemolytic Anemia
	SAR445088 ⁵	Complement C1s inhibitor	Cold Agglutinin Disease
	Fluzone ^{® HD} ⁸	Inactivated Influenza Vaccine (IIV)	Pediatric Influenza
	SP0218	Vero cell Vaccine	Yellow fever
	SP0202 ^H	Next Generation Conjugate Vaccine	Pneumococcal
	SP0125	Live Attenuated Virus Vaccine	Respiratory Syncytial Virus (RSV) toddler
	SP0230	Multicomponent Vaccine	Meningitis B

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R Registrational Study (other than Phase 3)

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1. Formerly known as SAR445229/KY1005. 2. Also known as SAR443122/DNL758. 3. Also known as SAR441344. 4. Also known as SAR444727. 5. Formerly known as BIVV020. 6. Formerly known as KY1044/SAR445256. 7. Also known as DNL788. Planned to enter phase 2 in MS. 8. Also known as SP0178.

R&D Pipeline – Phase I

Phase I

Name	Description	Indication
SAR441566	Oral TNF inhibitor	Inflammatory indications
SAR444656 ^{I,1}	IRAK4 degrader	Atopic Dermatitis
SAR444336	Non-beta IL-2 Synthorin™	Inflammatory Indication
SAR442970	Anti-TNFα/OX40L Nanobody® VHH	Inflammatory Indication
SAR443765	Anti-IL-13/TSLP Nanobody® VHH	Inflammatory Indication
SAR441000 ^J	Cytokine mRNA	Solid tumors
SAR442257	Anti-CD38/CD28/CD3 trispecific mAb	MM / N-H Lymphoma
SAR442720 ^G	SHP2 inhibitor + combinations	Solid tumors
SAR444881 ^K	Anti-ILT2 mAb	Solid tumors
SAR445419 ²	NK-cell-based immunotherapy	Acute Myeloid Leukemia
SAR443216	Anti-CD3/CD28/HER2 trispecific mAb	Gastric cancer
SAR445710 ³	Anti-PD-L1/IL-15 fusion protein	Solid tumors
SAR443579 ^L	Anti-NKp46/CD123 bispecific mAb	Acute Myeloid Leukemia
SAR446309 ⁴	HER2 T-Cell engager	Solid tumors
SAR444200	Anti-GPC3/TCR Nanobody® VHH	Solid tumors
SAR444245 ⁵	Non-alpha IL-2 Synthorin™ (dose optimization)	Solid tumors
SAR442501	Anti-FGFR3 Ab	Achondroplasia
SAR443809	Anti-Factor Bb mAb	Rare renal diseases
SP0273	mRNA QIV	Influenza

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1. Also known as KT474. 2. Formerly known as KDS1001. 3. Formerly known as KD033. 4. Formerly known as AMX-818. 5. Formerly known as THOR707.