

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 Obstructive Pulmonary Disease
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 Tt (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
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

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

Registration

Name	Description	Indication
Dupixent^A	Anti-IL-4/IL-13 mAb	Chronic Spontaneous Urticaria
Beyfortus^{1,B}	Anti-RSV mAb	Respiratory Syncytial Virus (RSV)

As of June 30, 2023. For collaborations see slide 59. For abbreviations see slide 60.
1. Also known as nirsevimab. Approved in EU and the UK.

R&D Pipeline – Phase II

Phase II

Name	Description	Indication
Dupixent^A	Anti-IL-4/IL-13 mAb	Ulcerative Colitis
R Kevzara^A	Anti-IL-6 mAb	Polyarticular Juvenile Idiopathic Arthritis
R Kevzara^A	Anti-IL-6 mAb	Systemic Juvenile Arthritis
amlitelimab¹	Anti-OX40L mAb	Atopic Dermatitis
amlitelimab¹	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
ecclitasertib^{C,2}	RIPK1 inhibitor	Cutaneous Lupus Erythematosus
ecclitasertib^{C,2}	RIPK1 inhibitor	Ulcerative Colitis
frexalimab^{D,3}	Anti-CD40L mAb	Sjogren's Syndrome
frexalimab^{D,3}	Anti-CD40L mAb	Systemic Lupus Erythematosus
SAR445088	Complement C1s inhibitor	Antibody-Mediated Rejection
Sarclisa	Anti-CD38 mAb	1/2L AML/ALL pediatrics
Sarclisa	Anti-CD38 mAb + combinations	Relapsed, Refractory MM
alomfilimab⁴	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

Name	Description	Indication
frexalimab^{D,3}	Anti-CD40L mAb	Multiple Sclerosis
SAR445088	Complement C1s inhibitor	CIDP
SAR443820^{C,5}	RIPK1 inhibitor	Amyotrophic Lateral Sclerosis
SAR443820^{C,5}	RIPK1 inhibitor	Multiple Sclerosis
rilzabrutinib	BTK inhibitor	Warm Autoimmune Hemolytic Anemia
SAR445088	Complement C1s inhibitor	Cold Agglutinin Disease
Fluzone HD⁶	Inactivated Influenza Vaccine (IIV)	Pediatric Influenza
SP0218	Vero cell Vaccine	Yellow fever
SP0202^E	Next Generation Conjugate Vaccine	Pneumococcal
SP0125	Live Attenuated Virus Vaccine	RSV toddler
SP0230	Multicomponent Vaccine	Meningitis B

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R Registrational Study (other than Phase 3)

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1. Also known as SAR445229. 2. Also known as SAR443122/DNL758. 3. Also known as SAR441344. 4. Also known as SAR445256. 5. Also known as DNL788. 6. Also known as SP0178.

R&D Pipeline – Phase I

Phase I

Name	Description	Indication
SAR441566	Oral TNF inhibitor	Psoriasis
SAR444656 ^{F,1}	IRAK4 degrader	Atopic Dermatitis
SAR443765	Anti-IL-13/TSLP Nanobody VHH	Asthma
SAR444336	Non-beta IL-2 Synthorin	Inflammatory indication
SAR444559	Anti-CD38 mAb Next Generation	Inflammatory indication
SAR442970	Anti-TNFα/OX40L Nanobody VHH	Hidradenitis Suppurativa
SAR442257	CD38/CD28/CD3 T-Cell engager	MM/N-H Lymphoma
SAR444881 ^G	Anti-ILT2 mAb	Solid tumors
SAR445419 ²	NK-Cell-based immunotherapy	Acute Myeloid Leukemia
SAR443216	CD3/CD28/HER2 T-Cell engager	Gastric cancer
SAR445710 ³	Anti-PDL1/IL-15 fusion protein	Solid tumors
SAR445877 ⁴	Anti-PD1/IL-15 fusion protein	Solid tumors
SAR443579 ^H	Trifunctional anti-CD123 NK-Cell engager	Acute Myeloid Leukemia
SAR445514 ^H	Trifunctional anti-BCMA NK-Cell engager	Relapsed, Refractory MM
SAR446309 ⁵	HER2 T-Cell engager	Solid tumors
SAR444200	Anti-GPC3/TCR Nanobody VHH	Solid tumors
pegenzileukin ⁶	Non-alpha IL-2 Synthorin (dose optimization)	Solid tumors
SAR446159 ^{L,7}	Anti-Synuclein/IGF1R mAb	Parkinson's disease
SAR442501	Anti-FGFR3 Ab	Achondroplasia
SAR443809	Anti-Factor Bb mAb	Rare renal diseases
SAR439459	Anti-TGFB mAb	Osteogenesis Imperfecta
SP0273	mRNA QIV	Influenza
SP0256	mRNA RSV	RSV older adults

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

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1. Also known as KT474. Planned to start Ph2 studies in HS and AD. 3. Also known as KD033. 4. Also known as KD050. 5. Also known as AMX-818. 6. Also known as SAR444245/THOR707. 7. Also known as ABL301.